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THE POULTRY PAPER FOR BEGINNERS.

VOL. 5.

BOSTON, MASS., MARCH 15, 1902.

NO. 9.

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A FEW HENS, Box 2118, Boston, Mass.

EDITORIAL HINTS.

Plan well. March winds. Study economy. Love your fowls. Spring's at hand. Don't get excited.
Don't keep drones.
Get out of the ruts. Keep on improving. Mark the good hens. Did you have a flood? Don't be extravagant. What is the egg score? Try to lead, not follow. Make safe investments. Gradual growth is best. February was a stunner. Don't be a back number. Keep the premises clean. Are the incubators busy? Don't have rubbish piles. Have matters ship-shape. Beginning large is a risk. Now for business activity. Take lessons from failures. Have a standard for quality. How about that ground hog? Slovenly ways are exposures. Take an interest in the work. Politics and poultry don't mix. Egg records beat show records. Did the house show dampness? Keep up the breed's trade marks. Beginners are apt to aim too high. Carelessness is a stumbling block. Better eggs than fuss and feathers. The dunghill breed is diminishing. Experimental Farm Notes.

Ups and Downs on a Poultry Farm— First a Blizzard and Then a Flood.

February, 1902, will go down in the history of the experimental farm. It was an experience that in a twenty-year life in the poultry yard we never met before. Three years ago we had a blizard—in several respects more severe than this one, but this year we not only encountered a blizzard, but were subsequently introduced to a flood.

Three years ago the blizzard came upon us February 13th. It was very cold, and more snow fell than this year.

This year the storm reached us February 15th—two days later—and the weather was not very cold for a blizzard. The snow would not have lasted very long had it not been that for a week or more before that, we had very cold weather, and the frost in the ground was deep. There was so much frost that, despite a few mild days, the melting snow could not go in the earth, but instead formed in pools about the poultry yards.

To make matters worse, this was followed by a heavy rain, in which it seemed there were several cloud bursts. The water rose in the yards and then down the lanes of the poultry plant, until it became necessary to go almost knee-deep in water to get to and from the houses in which part of the poultry were quartered.

By night of February 25th, the water began entering four of the houses in which were quartered fully one hundred fowls, and the work of removing them had to be begun at once. Where to put them was a problem. Every house on safe ground was already filled to its capacity, so that the only alternative was to store them away in boxes and crates that were on hand in the packing room. Such a job—ploughing through two feet of water with a wheelbarrow loaded with chickens, and the rain at the same time coming down in torrents—was enough to dampen the ambition of any poultryman, but it had to be done, for long before we finished our task (which took us until about ten o'clock at night) the water rose a foot in the houses.

Still the rain kept pouring down in torrents, and it was necessary to keep a watch. The faithful hired man—working hard through the storm all day and up until midnight—was fairly played out, and was allowed to go home, while the editor kept watch during the entire night. Every hour an inspection was made, but, notwith standing that the water rose to within an inch of entering some of the other pens, it seemed to remain at that point, and those houses were safe. The next morning the water fell a few inches, and gradually lessened each day, but still, at this writing—February 28th—there still remains a foot of water in the lanes, but the houses are clear of it.

To make matters still more encouraging (?) we are advised by the weatherwise sharks that a great rain storm is booked for today and Saturday and Sunday. We must say that it looks as if these predictions would come true, for just now the rain is coming down in full force, and the wind is blowing a lively gale. The only consolation we have is that if this storm continues tomorrow (March 1st), we can find relief in the old proverb: "If March comes in like a lion (stormy), she will go out like a lamb (mild)." Let tomorrow be fierce!

Probably by the time this is read by our readers, we will be merging on to gentle Spring weather—at least we hope so.

Later—February 28th, 2.30 P. M.: At this writing the water is again rising rapidly. One inch more and the houses will again have water in them. Between writing this article and preparing for the storm, the editor has his hands full. Oh, for gentle Spring!

Sometimes we find astonishing statistics as to eggs. In one of the Chicago dailies, the other day, there was a queer computation, as follows: Supposing you took a train to Evanston, and looked out of the car window, and saw every four feet either a hen or a rooster sitting down and watching the train all the way out to Evanston, you would probably think that you had seen a good many hens and roosters when you got there. But if all the hens in the country concluded to watch the trains go by at the

same time there would be enough to camp by the side of every railroad track in the country at intervals of four feet. You couldn't take a train anywhere without seeing a different hen every four feet if you looked out of the window.

That is because there are 284,000,000 chickens in the country, and 191,000

miles of railroad.

What a crowd of hens there would be in some of the Chicago freight yards, with their miles of tracks.

EGGS LAID IN A YEAR.

Each of these chickens laid on an average thirty-eight eggs in a year. The average does not seem high to city people, but it must be remembered that there are a good many chickens too young and too old to lay, while some are setting and others are males.

That made 10,000,000,000 eggs. The exact figures for the Department of Agriculture in 1900 are 10,000,524,384. This does not count those consumed before

getting to market.

If everybody in the United States, under a radical system of communistic distribution, were to get his fair share of chickens, each person would get three of the birds and a lion's share of a fourth. He would get 3.72 chickens.

In the whole of last year, did you eat

In the whole of last year, did you eat 128 eggs? That was the figure for the

average American.

How Many Tons of Eggs.

The lowest figure for eggs was 16 1-2 cents a dozen in 1900. That was the minimum market price for exports.

Eggs are light affairs, weighing only about two ounces apiece. Some weigh as little as an ounce and a half. Minorca eggs are the heaviest, being about five to the pound, while Wyandotte and Brahma eggs run seven or eight to the pound.

Probably all the eggs in the United States last year weighted about 653,000

tons.

This is about four times the total tonnage of the American navy, counting in even older ships.

Foods and Feeding.

Some Valuable Extracts Taken from the Hatch Experiment Station Bulletin No. 78.

Nearly all of the cottonseed meal had a guaranty of composition, and the protein content was above the average. Consumers are advised to purchase only guaranteed meals.

A few of the linseed products were guaranteed; most of the new process meals were of average quality, while many of the old process were inferior. Purchasers are cautioned against unguar-

anteed linseed products.

A large portion of the gluten products were guaranteed, but failed to maintain their protein guaranty in many cases. Several lots were noticeably below the average in protein. It is advisable to observe the guaranty before purchasing.

Nearly all the wheat bran and middlings were free from foreign admixtures and of good quality. A number of samples of mixed feed contained ground corn cobs and wheat screenings. Of these,

some were marked Kentucky Milling Co., others Kentucky, and a few were unmarked. Consumers are nrged to give the preference to those wheat byproducts bearing the name of reputable manufacturers.

Corn and hominy meals were of good

quality.

The larger portion of the oat offal upon the market was as usual decidedly inferior in feeding value. Many brands cost nearly as much as corn meal, and were only one-half to two-thirds as valuable.

Most of the mixtures sold as corn and oat feed consisted of oat offal, together with cracked corn or hominy meal. They are quite distinct and not as valuable as true provender, which is a mixture of whole or crushed oats

and cracked corn.

The term "concentrated feed," or "concentrate," taken in its broadest sense, is meant to include the grains and other seeds of agricultural plants, as well as their manifold by-products left behind in the process of oil extraction and in the preparation of human foods.

All cattle feeds, whether concentrated or coarse, are made up of the following

six groups of substances:

Water.—The several grains and byproducts contain when placed upon the market from 6 to 12 per cent of water.

Ash represents the mineral ingredients of the feed. It will remain behind as ashes should the feed be burned. These ashes consist of lime, potash, soda, magnesia, iron, phosphoric acid

and sulpliuric acid.

Protein is the general name for all of the nitrogenous matter. It corresponds to the lean meat in the animal, and may be termed "vegetable meat." It has the same elementary composition as animal flesh, and is considered the most valuable part of the feed.

Fiber or Cellulose is the course or woody part of the plant. It may be called the plant's framework. It is present, as a rule, only to a limited extent in

the grains and by-products.

Non-nitrogenous Extract Matter consists of sugars, starch and gums. The grains are very rich in starch and

similar substances.

Fat includes not only the various fats and oils found in different feed stuffs, but also waxes, resins, and coloring matters. It is sometimes termed ether-extract, because it represents that portion of the plant soluble in ether. Fat found in grains and seeds is comparatively free from foreign substances (waxes, resins, etc.)

substances (waxes, resins, etc.)
Carbohydrates.—The fibre and extract
matter have the same functions in the
process of nutrition, and collectively

they are termed carbohydrates.

Nutritive Ratio.—The numerical relation which the protein of a feed bears to the carbohydrates (and fat reduced to carbohydrates) is termed its nutritive ratio. Fat is multiplied by 2.25 to convert it to carbohydrates. If a ton of feed should contain 96 pounds of digestible protein, and 928 pounds of digestible carbohydrates, it would have 9.4 times as much carbohydrates as protein, or 1:9.4, which is its nutritive ratio.

Digestibility.—Any feed stuff is valuable as a source of nourishment of so far as its various parts can be digested and assimilated.

Most of the home-grown coarse fee are high in carbohydrates, low in tein, and comparatively indigest. Nearly all of the concentrated feare very digestible, and a large the are high in protein are medium in carbohydrates. The centrated feeds are fed with the grown coarse feeds, there for the processes the digestible made second to increase the amountein in the daily ration.

The seed of the cotton plant a from the gin where the conhas been removed, is still cover a coat of white down, tech known as linters. This being moved, the seed itself appears t in color, and irregular egg-shape form. The thick, hard, black coat or hull, is filled with the embryo (meat) which contains a l. number of oil cells. Machines h been invented to remove the hi The meat is cooked in large iron 1 tles, and while still hot is wrapper hair cloth, and subjected to a pressi of 3,000 to 4,000 pounds to the sque inch, to remove as much of the oil possible. The pressed cottonseed cake when cracked and ground results in the bright yellow decorticated cotton-seed meal of commerce. A ton of seed furnishes about 800 pounds neal. Sometimes a considerable amount of hull is ground fine and mixed with the meal, producing a dark-colored article having a feeding value of about one half the prime material.

Liuseed meal is the ground residue from the flax seed, after the oil has leet removed. The larger part of the flax seed used in this country is grown in North and South Dakota and Minnesota. The seeds of the flax plants are flattened, elliptical oval, pointed at the lower end, and of a brown color. They contain, in their natural state, from 30 to 35 per cent of oil. Twenty to twenty-eight per cent of the oil of the seed is removed by warm pressure and seven per cent remains in the pressed residue. This oil is known as linseed oil, and after being refined is used in the preparation of paints, varnishes, printer's ink, and in the manufacture of soap. The pressed cake is dried, cracked and ground, and furnishes the old process linseed meal. In case of the new process linseed meal, a particular brand of which is known as flax meal, the oil is quite thoroughly extracted from the ciushed seeds by means of naptha, and after the extraction the meal is treated with steam, which removes the solvent and tends to produce a coarse flaky product.

Linseed meals are generally known as oil meals. This is an incorrect name, the oil having been removed to a considerable extent.

The various products known as gluten meal, gluten feed, germ feed and the like, are the residues from the manufacture of starch and glucose (grape sugar) from maize or Indian corn.

The average of a large number of analyses of water-free Indian corn, shows it to have the following composition:

Fiber, 2.5 per cent. Extract matter (chiefly starch), 78.9 per cent. Fat, 5.4 per cent.

It is apparent that the corn is made up chiefly of starchy matter. The removal of the larger part of the starch naturally increases the proportion of the other ingredients. The constitu-ent of the corn next in amount to starch is protein,—a general name for all albuminoids. In case of corn it is called gluten, and the feeds have been termed gluten feeds. Even in the best methods of separation, the starch is not all removed, the residues often being made up of one-half starchy matter.

The gluten meal and more or less of the corn bran mixed together, pressed and dried, constitutes Gluten Feed.

Distillers' dried grains consist of the residue in the process of manufacturing alcohol, spirits, and whisky, from the several cereals. Briefly stated, the process consists in grinding the various grains employed, and heating them with a solution of malt, thus converting the starch into sugar. The addition of yeast converts the sugar into alcohol, which is then distilled, and the residue or distillery slop is filtered, dried in especially constructed dryers, and put upon the market as a cattle food. It consists chiefly of the hull, germ and protein of the grains. It has a more or less sour taste and smell, because of the fermentation. If the slop remains undried too long, this sour condition is increased.

Brewers' dried grains is the kiln-dried residue from beer manufacture. It consists of some of the starch, together with the hull, germ and gluten of the barley. A small portion of the gluten and the larger part of the starch are removed from the barley by the action

of diastase and yeast.

Malt sprouts. Malt used in beer manufacture is prepared by moistening barley and allowing it to sprout. The sprouting produces a ferment called diastase, which changes the starch into sugar. After the formation of diastase, which requires a certain number of days, the barley is dried, and the sprouts removed by machinery and sold for cattle feed. The barley is now termed malt.

Bran, or the outside coverings of the kernal contains about 16 per cent of protein, in addition to ash, fat, fiber and starchy matter.

Standard middlings may be defined as the finer portion of the bran mixed with rather more starchy matter.

Red dog-a low grade flour-represents the dividing line between the middlings and the high grade flour. It is rich in gluten, containing 20 per cent or more of protein.

Flour middlings consist of a mixture of the finer portion of the middlings, and more or less red dog flour. They contain 18 to 20 per cent of protein, and are more digestible than either the bran or coarse middlings.

Cerealine feed. This feed comprises the hull, and some of the starch of the corn. It is the by-product resulting in the manufacture of the breakfast preparation known as cerealine flakes. It is very course. It possesses a feeding value but slightly inferior to corn meal.

Hominy meal or Hominy, as used for human food, represents the hard part of the corn kernal. The separation of the hull, germ, and some of the gluten and starch which constitutes the cattle feed, is said to be brought about solely by the aid of machinery and steam.

Corn bran, formerly known as chop feed, has been referred to under gluten

products.

Out feed, corn and out feed, and proven-der. Out feed is the refuse from factories engaged in the preparation of oatmeal and other cereals for human consumption. It consists of poor oats, hulls and some of the bran and starch removed in the process of manufacture. It is frequently mixed with corn, and sold as corn and oat feed, or as a provender. True provender is a mixture of cracked corn and oats, and should contain at least 10 per cent of protein and four per cent of fat. It should not be confused with the numerous mixtures of oat offal and corn sold under a similar name.

The cottonseed meal on sale the past year was rather above the average in composition. The lowest percentage of protein found was 41.15, and the

HAVEN'T SOLD all my White Rocks yet.
They're going. H. D. Hopkins, Montpelier, Vt.

Guaranteed Fertile

and to HATCH or else

REPLACED FREE.

S. C. WHITE LEGHORNS, S. C. BLACK MINORCAS, BARRED PLYMOUTH ROCKS, WHITE PLYMOUTH ROCKS, WHITE WYANDOTTES, LIGHT BRAHMAS.

Line bred since 1888 for great egg production and show room qualities.

ECCS \$3 per 12; \$5 per 24. Special Cockerel Mating \$5 per 12.

ELM POULTRY YARDS, Catalogue free. Box H, Hartford, Conn.

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Makes the Eggs Come: the hens simply can't help themselves. Quadruple strength. Small teaspoon-ful in mash to thirty hens in winter, or forty in summer. Used daily, costs but 12c. per hen per year. Price 25c.; by mail 31c.

315 Agents Wanted Everywhere.

le so good that we will let you guarantee it in le so good that we will let you guarantee it in your own language. Only Roup and Canker cure which precipitates all impurities from the water. Administered in drinking water — no trouble. Never known to fail: in fact cannot fail. "Costs most, yet is cheapest." Price 50c., postpaid.

FREE. Eggs. Kum Egg Record*

Eggs. Kum and Roupino are manufactured by Reliable Remedy Co., 497 Third Avenue, N. Y.

General Agents:—Cyphers Incubator Co., Boston, Chicago, New York, Buffalo. J. W. Miller Co., Freeport, Ill. Godbe-Pitts Co., Salt Lake City, Utah. Atlanta Seed Co., Atlanta, Ga.

average of the sixty-nine samples showed 45.60 per cent of protein, equivalent to 7.3 of nitrogen. If purchasers will insist on having only guaranteed meals, this standard can surely be maintained.

Most of the old process linseed meal formerly contained 35 per cent of pro-tein. The samples collected the past year averaged only 32.26 per cent, and a number of lots contained less than 30 per cent. A noticeable exception was the meal put out by Kellogg & Miller, which was guaranteed, and tested 37.6 per cent of protein—a per cent above the guaranty. The new process meal showed an average of 37.54 per cent protein. While it can hardly be said that the old process



White Wyandottes

Bred for Eggs and Meat.

They are plump, hardy, vigorous birds, and heavy winter layers. The eggs hatch and the chicks live and grow. We use scratching sheds and get fertile winter eggs. Eggs \$1.00 per 16; \$1.75 per 30; \$5.50 per 100. Can be called for if preferred.

I. J. STRINGHAM,

105 Park Place, New York, or Glen Cove, L. I.

BEE KEEPING goes well with poultry culture. A colony of Italian Bees, and complete hive for \$7.50. Catalogue Free.

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EGGS and MEAI

That we may secure the best proportioned carcasses, with the most and finest meat qualities—together with great egg records, we so mate our stock that the young will be strong followers, if not superior, to the parent stock. We use none but strictly hardy, vigorous birds in our breeding pens—keeping as close to the Standard requirements as is consistent for good health and profit—utility being our aim. The result is, we have good fertility, rapid growth, hardy constitutions, and vigorous young stock.

We use Trap Nests,

thus enabling us to pick out our best layers, and each year we mate only the cream of the flock.

LIGHT BRAHMAS. Grand Winter layers. Eggs for hatching—\$2.00 per 15; \$5.00 per 50.

WHITE WYANDOTTES Eggs for hatching S. C. WH. LEGHORNS from either variety, BAR. PLYM. ROCKS \$1.50 for 15; \$4 for 50.

Selected brown eggs of WH. WYANDOTTES, \$2.00 per 15; \$5.00 for 50.

Address:

MICHAEL K. BOYER,

Hammonton, Atlantic Co., New Jersey.

meals were adulterated, most of them were certainly below the average quality. The larger part of the linseed collected was not guaranteed.

The gluten meals examined were of good quality, although in many cases the guarantees were not met. A few samples of gluten feed were collected, containing from 17 to 22 per cent of protein, but the larger number showed

25 or more per cent.

Germ oil meal-the pulverized germ of the Indian corn—was of the usual good quality. Its protein guaranty of 25 per cent is too high, 22.65 per cent being found two years ago, and 21.85 per cent the past year. This meal should not be confused with linseed meal, sometimes spoken of as "oil meal."

Wheat bran and middlings were fully up to the usual average in composi-tion. Purchasers are advised, however, to give the preference to those articles branded with the names of reputable manufacturers, or to examine the article closely before buying,

in order to note the quality.

Mixed feed, so called, consists of the entire wheat offal, or mixtures of bran, coarse and flour middlings. The larger the proportion of flour middlings, the more valuable the feed. Different brans show noticeable variations in the proportion of the several ingredients. The average percentage of protein found in the samples reported in the present bulletin is 17.75, against 17.00 a year ago. Most mixed feeds are entirely free from adulteration. A few samples were found containing a considerable quantity of ground corn cobs. A number of other samples contained a noticeable amount of wheat screenings. Mixed feed containing cobs can generally be recognized by the hard woody nature of the material when chewed. A close inspection of the feed will reveal the presence of screenings. Consumers are especially cautioned against such feeds.

Farmers can obtain a very desirable mixed feed by mixing equal parts, by weight, of bran and flour middlings, or red dog flour. Such a feed will be decidedly preferable to many of the brands now on the market, and the cost will not be increased.

The samples of malt sprouts collected contained 27 to 29 per cent of protein, which is several per cent above the average. The prices at which they are usually offered, render them one of the cheapest sources of protein.

Comparatively few samples of corn meal were collected for examination, there seeming to be no inclination to adulterate this article. Corn meal will vary more or less in quality, depending on the character of the corn from which it is derived. The samples of hominy meal examined were of the usual good quality. This feed averaged 10.87 per cent of protein, and 7.74 per cent of fat in 1899; 11.24 per cent of protein, and 8.93 per cent of fat in 1900; and 11.23 per cent of protein, and 9.27 per cent of fat in 1901.

TO make cows pay, use Sharples Cream Separators. Book 'Business Dairying' & Cat. 247 free. W. Chester, Pa.

The better grades of these feeds contained 7 to 8 per cent of protein, and 20 per cent of fiber, the fiber percentage being indicative of fifty to sixty per cent of hulls. The lower grades contained from 1.45 to 6.80 per cent of protein. One brand with the attractive name of "Very Rich," contained 2.63 per cent of protein, another with the aristocratic name of "Boston," showed a protein content of 4.26 per cent, and a third marked "X," tested 1.45 per cent of protein. These three were practically all hulls, and yet, the price asked in October was from \$16.00 to \$18.00 per ton. The so-called Magnolia Ground Oats is a misnomer, the material being an average quality of oat offal. The article branded "Lincolushire Fancy" is also oat offal.

It is not intended to convey the impression that oat offal is worthless as a cattle feed. It is believed that material of this character, containing from 50 to 75 per cent of hulls, in many cases ground fine to appear like meal, is decidedly expensive at the usual market prices. Certain it is, that with the variety of excellent feed stuffs now on the market, decidedly more economical grain rations can be obtained for the animals on the farm than is to be found in material of this character.

It is stated that many local millers buy inferior grades of oat offal, mix them with corn meal and cracked corn, and sell the mixture as provender. Feeders are cautioned against such adulterations. Combinations of corn and whole oats should contain ten per cent of protein and four per cent of fat.

Schumacher's corn, oat and barley feed was above the guaranty in both protein and fat. It has been even in composition, and as represented, since the inspection of feed stuffs was begun in this State. The different brands of poultry feed are evidently honest attempts to place on the market such grain mixtures, either ground or whole, as will be satisfactory to ponl-try raisers. It is believed that it is more economical for poultrymen to purchase the several grains separately than to depend upon these feeds for their supplies.



\$2.00 for 100 lbs. Oyster Shells, 100 Grit, 50 Bowker's Animal Meal, 25 Eclipse Leg Bands. New circular. Sumner Johnson, Portland, Me.

BROWN LEGHORNS are great layers. Eggs for hatching from pure bred, farm raised stock. Prices reasonable. Write. Egg Record free. LEE SHORTT, Lower Cabot, Vt.

LEGHORNS. Single and Rose Comb Brown and Buff. 15 eggs for 75 cents; 105 for \$4. Mr. and Mrs. S. Rider, Maryland, Otsego Co., N. Y.



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PRAIRIE STATE BROODERS.

Now being used on the largest poultry farms in the world. Have never been defeated in the show room in the keenest competition. Large Illustrated Catalogue Free.

POULTRY SUPPLY CO., EXCELSIOR WIRE AND W. V. RUSS, Prop. 26 and 28 Vesey St., New York City. The meat and bone meals and meat scraps vary more or less in composition, depending upon the amount of bone and fat they contain. They are valuable chiefly for their protein content, and should be sold on a guaranty of composition.

Red Albumen has been sold quite freely in New York State of late. The New York Station reports some of it to consist almost exclusively of Venetian red (oxide of iron) and sand, worth from one to two cts. a pound. Another lot proved to be a nitrogenous byproduct, containing 72 per cent of protein—retailing at 50 to 60 cents a pound—and worth about 3 cents a

One sample of red albumen recently sent to this Station, was found to contain 45.72 per cent of protein. It was put out by a Boston druggist, and consisted of nitrogenous matter resembling ground bone glue, mixed with red pepper. Good beef scrap, costing two and one-fourth cents a pound is preferable to such material for egg production. The composition and value of condimental stock and poultry foods, have been fully explained in Bulletin 71, to which the interested reader is referred.

Our Brevity Symposium.

Readers of A FEW HENS are Invited to Answer Questions that Monthly Appear in These Columns, as Well as to Ask Questions to be Answered.

No. 127.

Would large Bantam cock crossed on Leg-horns produce a two and one-half pound fowl —and would it increase the egg yield?

We never raised Bantams, but from experience in crossing Leghorn males on females of larger breeds, we can say that we produced birds as large as the original females, of quicker growth, and equal to the Leghorns in laying. Besides, we produced a large brown egg.-Homestead Poultry Farm, Hopkinton, Mass.

No. 128.

What is the best system of breeding white and light colored feathers out of Brown Leghorns? No experience in that line.—Homestead Poultry Farm.

No. 129.

Which is the most expensive, thirty sitting hens or an incubator and brooder, to hatch and raise their full capacity at one sitting?

We figure thus for hatching, April 1st:

We fighte thins for hatching, April
30 hens, each \$1 00,
Loss in eggs. 21 days, 17 doz., at 20c.
Loss in eggs. 42 days, 17 doz., at 20c.
150 ft. box material for 30 nests, at 1 1-2c.
Time required to build same (1 day)
Time to care for 30 hens for 21 days,
Feed for 30 hens, 21 days,
15 brood coops (2 broods to each hen)
300 ft., at 1 1-2c.,
Labor to build same, 2 days,
Feed 15 hens, 42 days,
Labor 42 days (care of broods) \$30.00 3.40 3.40 2.25 2.00 1.48 4.50 4.00 1.58 8.40

\$66.21 One incubator, 360-egg capacity, Brooders, same capacity, Oil for incubator, 21 days, Labor in care of incubator, 21 days, \$35.00 25.00 .70 1.05 3.08 8.40 Oil for brooders, 42 days, Labor, in care of brooders, 42 days,

\$73.23.

No. 130..

What weight do you understand by the term "condition?" That is, how near is it to the Standard weights given for the several varieties? I mean laying condition.

A hen must indeed be a large one that can tip the scales at the required Standard weight, while in heavy laying condition. Our hens that weigh to the Standard when in show condition, will fall about a pound short while in good laying form.—Homestead Poultry Farm.

Belated Replies.

For slight colds I grease the nostrils with lard, when the birds are on the roost, if I notice that they have slight discharges from the same.—Edw. H. Lewis, Magnolia, N. J.

New Questions.

131. How do you treat fowls with scaly legs?

What means do you employ in testing your thermometer for accuracy? How often do you consider it necessary, and do you find them to vary much?

Do your hens ever go lame during the Winter, and what do you think causes it?

134. What profit did you have during 1901, per head, on your hens? 35. What advantages have you found

in the use of trap nests?

WORD ABOUT INCUBATORS

If you want an Incubator or Brooder you should send for our free catalogue. We are making the hit of the year by offering a roo-egg 3 walled copper tank (hot water) self-regulating perfect Incubator for \$10.00. Sent on 40 Days Trial. Pay when satisfied. Nuff said.

GREAT WESTERN INCUBATOR CO.,

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EGGS 10 cts, each. W. Wyan., B. Rocks, bred for eggs and meat. S. C. W. Leg. for heavy laying. EGSCUM YARDS, Bordentown, N. J.

ALL BREEDS OF POULTRY, Pigeons, Rabbits, Belgian Hares, Cavies, Pheasants and all Pet Stock. Eggs and Stock for sale. Our large Illustrated Circular free. Excelsior Wire and Poultry Supply Co., Dept. H, 26 & 28 Vesey St., N. Y. City.

ROSE Comb White and Brown, Single Comb White Leghorns, White Klondikes, Wh. Indian Game Bantams. Eggs 75c. per 15. Some fine cockerels for sale. Mrs. H. Valentine, Cambridge, N. Y.

TNCUBATOR EGGS from pure bred White Wyandottes of the best strains. Choice, farm raised stock. \$3.00 per 100; \$2.00 per 50. Address, S. DEAN, Oak Hill, N. Y.

Formula for Roup cure, Lice Killer Egg Producer, etc., 25 ets. Box 103, Rockville, Conn.

Mountain View Farms White Leghorns have been bred for over ten years for heavy laying, by F. L. DuBOIS, on his farms at Loyd, N. Y.

Making Fancy Market Eggs a Specialty. After using stock from Burpee, Knapp Bros. and C. H. Wyckoff, since '95, on my original stock, which were good White Leghorns, and with the results they are giving on my farms and with others, I am fully convinced of having as good a strain of S. C. White Leghorns, for eggs, size and vigor, as their exists today, as a test will convince you. Eggs for hatching \$1 for 15; \$3 for 50; by hundred \$5.

ALSO INCUBATOR EGGS for broilers, from a crossing of Plymouth Rock and White Wyandottes, mated this year to unrelated White Wyandotte cocks, \$4 per 100.

NEVER PUT OFF

'till tomorrow, when you have this opportunity to purchase eggs from thoroughbred stock at \$2 per 15. Wh. Wyandottes, Wh. Plymouth Rocks. We have pur-chased Egg Harbor Farms entire stock of White Rocks. C. G. BAXTER & SON, Merchantville, N. J.

Setting Hens and Little Chicks.

Never set a hen with scaly legs. Pullets are unreliable as setters. A wild hen will have wild chicks. Dust the hen well before setting her. When the chick droops look for lice.

Protect the chicks from the hot suns. See that the chicks are supplied with

Clean up the nests if the hens befoul them.

Sprinkle insect powder in the nest every week.

The scratching hen gives her chick much exercise.

Leave the hen with her young so long as she "clucks."

Give whole wheat to the hen, and soft feed to the chick.

Drive the young under shelter during sudden showers of rain.

Spade up the runs, and thus get the chicks to search for worms.

It is better to keep the chicks indoors during inclement weather.

Whole corn, grit and fresh water is the best fare for the setting hen.

The fact that the hen is laying is no sign that she wants to leave her young. Have a little run in front of the nest of

the setting hen, so she can go in and out at will.

Thirteen eggs in early Spring, and fifteen during late Spring and Summer, are large enough sittings.

Covered runs are a protection from hawks, cats or dogs. They should be moved to fresh plots of grass each week.

We whitewash the interior of our chick coops, and sprinkle Whitney's Super-Carbolate of lime on the floor. This disinfection drives away lice.

ARATOMA

Katonah, (Westchester Co.) New York.

We have at all times Choice Stock for sale. Also Eggs for Hatching. Write us your wants.



The only low-cost book on the Rabbit ever published to onr knowledge, is "The Rabbit: How to Select, Breed and Man-Hare, for Pleasure or Profit," by W. N. Richardson, a man of long experience with Rabbits. Third edition now ready, nicely illustrated, enlarged and much improved with breeders' directory. Price 25 cts. or with AMER ICAN POULTRY ADVOCATE one year 40 cts.

ICAN POULTRY ADVOCATE one year 40 cts. CLARENCE C. DEPUY, Publisher, Syracuse, N. Y

K. FELCH & SON.

Box K, Natick, Mass.

Light Brahmas, Plymouth Rocks, White Wyandottes and

Belgian Hares.

Bred to lay eggs and to win. Write for just what you want. We can send it.

That's what you want, from Bock's pure bred Barred Plymouth Rocks. Bred for heavy laying, combined with large carcasses. \$1.50 per sitting, Incubator eggs, \$5 per 100.

W. H. BOCK, R. D. No. I, Carnegie, Pa,

Artificial Incubation and Brooding.

Pointers on Artificial Methods that are Worth Remembering.

A bulletin of the Montana Agricultural Experiment Station gives the following hints on managing incubators: Wherever poultry keeping has become a prominent feature in farming operations, it has almost invariably been the rule that incubators have been introduced. This is essential, since chicks can then be hatched in time for the early broiler market, and in time for the pullets to mature for Fall and Winter laying. Another profitable feature is the saving of attendants' labor, and of the hen's time. Three hundred and fifty eggs are as easily managed in an incubator as 35 eggs under three hens. In operating an incubator to the best advantage it will be found that even with the best machines the most accurate regulation of heat in the egg chamber is to be had in a room where the temperature is constant, and the ventilation good. A cellar, as a rule, is about the best place that can be found. Good ventilation is essential, since the little chicks require a considerable amount of oxygen for the vital functions, and the lamp of the machine exhausts the supply in its im mediate vicinity where the ventilation is imperfect.

Run the machine at one hundred and two and one-haif degrees throughout, allowing the temperature to run up just before hatching to 104 or 105 degrees if it is inclined, not endeavoring to check the rise until it gets beyond 108 degrees, its maxim um, which temperature will not be too high when

the chicks are coming out rapidly.

Under no ordinary circu instances should the machine be opened when the chicks are hatching. It is of the greatest im portance that the temperature and humidity should remain constant at this particular time, and none of the chicks should ever require any assistance in leaving the shell. Should the machine be opened the rapid evaporation causes a sudden cooling of the egg chamber, and also dries it off, so that many chicks just pipped stick to the shell and do not hatch.

When the hatching is well over the machine should be opened and the unhatched eggs removed. It is our practice to allow the chicks to remain in the machine for the first 24 hours at a temperature of from 90 to 94 degrees, transferring them to the brooders about the time they should receive their first feed.

Handle the eggs in the incubator as little as possible. Sweaty and dirty hands stop the pores of the eggs, and may also impart delecterious odors when such eggs are returned to the incubator heat. There is not enough stress put on the importance of having strictly clean hands when handling eggs in the course of incubation. The incubation of eggs may be stopped by what seems a very insignificant cause. Avoid handling as much as possible.

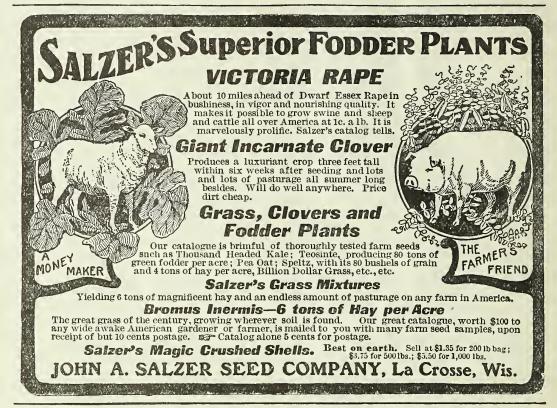
BUFF ROCKS. Incubator eggs \$4 per 100. Echo Poultry Farm, Windham, N. Y. E. Stimpson, Prop.

Much of the mortality of brooder chicks is due to inclement weather, which induces lung and bowel diseases. The Rhode Island Experiment Station has found that the temperature should be evenly maintained, and not allowed to fall below sixty degrees, nor go above ninety. Where chicks are kept in outdoor brooders in severe weather, the sudden change from the temperature of the brooder to that prevailing outside, gives many of the chicks lung diseases from which they never recover. Pueumonia, tuberculosis, congestion of the lungs and diarrhoea, are the common forms of trouble.

Eggs and Egg Farming.

The West Seems to Have More Trouble With "Egg Corners" Than the East-The Demand Here is too Great for Strictly Fresh Eggs.

Egg prices are still high. The cold hen cannot lay. Experiences are still high. Mix exercise with the ration. Alternate males for strong fertility. Exercise gives best heat to the body. Changeable weather affects egg produc-





Green Bone Cutters, Shell Mills, Drinking Fountains, Feed Trays, Oyster Shells, Beef Scraps, Meat Meals, Condition Powders, Egg Foods, \$5.00 Prize and Champion Brooders, Egg Cases, Eggs and everything for the successful breeding of poultry and pet stock. Our large Illustrated Catalogue Free. Send for one. EXCELSIOR WIRE AND POULTRY SUPPLY CO., Dept. H,
W. V. RUSS, Prop. 26 and 28 Vesey St., New York City.



recognized the most perfect small hatcher. This new incubator is thoroughly well made; is a marvel of simplicity, and so perfect in its working that it hatches every fertile egg. Write for anything you want to know about incubators. Send for the new free illustrated catalogue.

CEO. H. STAHL, Quincy, III.



BRED ECCS AND TO LAY TO

S. C. R. I. REDS WON 1st cock, 1st and 2d pullets, on Leghorns, in a hot class at Lynn,
S. C. WH: LEGHORNS. Mass., 1900. Also 1st for doz. large eggs. First pen fowls, 1st pen chicks,
on Reds, over thirty birds competing, at Kennebunkport, Me., Oct. 3, 1901.
EGGS from hardy, vigorous prize stock, 15, \$1.00; 50, \$3,00. HARRY C. NUNAN, Cape Porpoise, Maine.

A hen that will only eat and not work should be potted.

The severe weather of February certainly hurt the egg crop.

Don't cut down the ration because the

hens are not laying well.

An egg added to the morning cup of coffee makes a good tonic.

A mustard plaster with the white of an egg will not leave a blister.

The white skin that lines the shell of an egg is a useful application for a boil.
Cold storage has not as yet done the
damage to the egg market that was

A raw egg, with yolk unbroken, in a glass of wine, is beneficial for convalescents.

A raw egg taken immediately will carry down a fish bone that cannot be got up from the throat.

All practical poultrymen believe in feeding three times a day. It is the theorist that thinks otherwise.

It is noticed that brown egg layers vary the colors of their eggs if they are doing very heavy laying.

White of an egg beaten with loaf sugar and lemon relieves hoarseness. Take a teaspoonful every hour.

Continually changing rations does not assist in egg production. Have a good ration and then stick to it.

Overfat is not the only reason why hens don't lay well. Filth, crowded quar-

ters, etc., are equally at fault.

Tests have indicated that alfalfa is a splendid feed for chickens in Winter, increasing the egg yield and promoting the general health of the flock. The trap nest is not a "make-hens-lay" machine, but it is a private detective, arresting the poor layer, the drones, the egg-eater, the undesirable fowl.

Many consumers would do better to trust to the honest seller, who desires to hold his customers, than to trust their own judgment, says H. Warren Phelps, in Country Gentleman.

Armour & Co. and Swift & Co., have in cold storage 500,000 cases, or 15,000,000 dozen eggs, which were purchased at an average price of about 23 cents a dozen. If sold now at 35 cents a dozen, the holders of the eggs would receive gross receipts amounting to \$1,800,000.

Two years ago Armour & Co., through agents, purchased nearly 1,000 cases of eggs in the poultry raising states of the West, and held them in storage for an advance. The "corner" was not broken on that account until the price of eggs reached 45 cents a dozen at retail. Armour & Co.'s profits were placed at \$2,000,000.

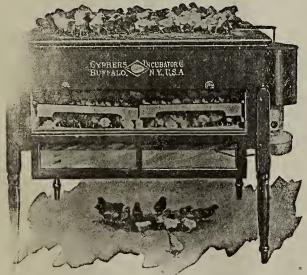
Farm, Field and Fireside says: "Some say the high price was owing to the cold snap; but others say it was an attempt by the beef packers to corner the market. According to good authority, two packing companies—the Armour and Swift concerns—within the last ninety days acquired and withdrew from the market 500,000 cases of Western eggs. The result is a corner in the visible supply, with its inevitable accompaniments." The Asiatics, Brahmas, Cochins and Langshans, in their several varieties, lay dark-tinted eggs, brown eggs, the Langshan egg in particular being very often a very dark, almost a chocolate brown, says Farm-Poultry. The eggs of fowls of the American breeds-Plymouth Rocks, Wyandottes, in their varieties, and Rhode Island Reds-are sometimes quite a dark brown, but the eggs from average fowls of these breeds are not deeply tinted, while practically all the non-sitting breeds— Minorcas, Leghorns, Spanish, Polish, Hamburgs, Houdans, etc., lay white eggs, though occasionally some of these lay slightly tinted eggs.

The scarcity of truly fresh eggs, now that cold storage eggs have so greatly taken the place of limed eggs, is not so apparent as it used to be. It was much easier to tell a limed egg from a fresh one than it is the cold storage product, says Baltimore Sun. Appearance is deceiving, and it takes a pretty good expert to judge eggs by the shells—whether they are cold storage or recently laid. It can be done, however. Eggs that are from cold storage, if they are used inside of twenty-four hours, pass quite as readily as fresh with many people. Their good qualities deteriorate rapidly, however. To an expert there is a different "feel," and an appearance of the shells tells him which are the cold storage eggs.

A FEW good White Wyandotte pullets. Write quick. H. T. BUSS, Groveland Station, N. Y.

YOU **SUPPOSE**

The BEST KNOWN and MOST successful poultrymen of America use and swear by



It is not because the Cyphers is the cheapest in price, nor because they love the manufacturers.

∃THEN WHY IS IT?⊱

UNQUESTIONABLY it is because the poultry business has developed until now experienced poultry raisers understand that to be successful they must be supplied with an incubator that will bring forth a robust chick from every hatchable egg. The Cyphers was designed to meet this demand, and we have not felt justified in cutting down the quality of our goods to meet the prices of cheaper machines. A first-class article in every line of manufacture commands a fair price, and when quality and results are well considered, the Cyphers is today the cheapest machine on the market.

FOLLOWING IS A SAMPLE LIST of foremost poultrymen who use the Cyphers, and unhesitatingly pronounce it to be the best incubator on the market:

A. C. Hawkins, Lancaster, Mass.
A. C. Hawkins, Lancaster, Mass.
Arthur G. Duston, Marlboro, Mass.
Knapp Bros., Fabius, N. Y.
E. B. Thompson, Amenia, N. Y.
Bradley Bros., Lee, Mass.
Samuel Cushman, Bristol, R. I.
Philander Williams, Taunton, Mass.
H. J. Blanchard, Groton, N. Y.
J. W. Shaw, Brockton, Mass.
W. S. Russell, Ottumwa, Iowa.
Geo. W. Mitchell, Bristol, Conn.
W. B. Gibson & Sons, W. Alexander, Pa.
Henry Steinmesch, St. Louis, Mo.
Aug. D. Arnold, Dillsburg, Pa.
M. S. Gardner, Philadelphia, N. Y.

or on the market:

C. F. A. Smith, Waltham, Mass.
Dr. O. P. Bennett, Mazon, Ill.
U. R. Fishel, Hope, Ind.
L. C. Piser, Shushan, N. Y.
O. E. Skinner, Columbus, Kans.
Sharpe Butterfield, London, Ont.
P. H. Gossard, Mo. Valley, Iowa.
J. H. Jackson, Hudson, Mass.
W. H. Bushell, David City, Nebr.
F. W. Richardson, Hicksville, Ohio,
W. H. Overbangh, Hanover, Pa.
C. S. Wetmore, Lockport, N. Y.
M. F. Norris, Lexington, Ky.
F. S. Nicholson, Cambridge, N. Y.
Willis J. Storke, Groton, N. Y.

Remember that the PATENT-DIAPHRAGM. NON-MOISTURE, SELF-VENTILATING and SELF-REGULATING CYPHERS INCUBATOR is now used on no less than 26 GOVERNMENT EXPERIMENT FARMS IN THE UNITED STATES, CANADA. AUSTRALIA and NEW ZEALAND, where the professors of agriculture and poultry experts use it to demonstrate to their annual poultry classes the scientific principals of artificial incubation; note fac-simile letters of endorsement on pages 65-83 of Complete Catalogue.

EACH AND EVERY CYPHERS INCUBATOR is sold with the distinct understanding that it will do satisfactory work in the hands of the probaser, or it can be returned within ninety days and the price will be refunded.

**LFGANT 180-PAGE* (8 x 11 inches in size) COMPLETE CATALOGUE FOR 1902, containing over 200 half-tone reproductions of photosoft the largest and best managed plants in the world, sent postpaid to any address for 10c. in stamps or silver. Ask for Book No. 29 and address nearest office.

-CYPHERS INCUBATOR CO.,-

A FEW HENS.

Published Once a Month.

Sample Copy Free.

Price, Monthly, Three Cents.

By the Year, Twenty-Five Cents.

Send all orders to

I. S. JOHNSON & CO., Boston, Mass.,
PUBLISHERS.

ADVERTISING RATE:

The rate per agate line is 15 cents each insertion; or 10 cents per line if order is for six months or more. About seven ordinary words make one line. There are fourteen lines in each inch space, single column.

Entered at the Post-Office at Boston, Mass., as second-class matter, by I. S. Johnson & Co., Publishers, 22 Custom House St., Boston, Mass.

EDITORIAL,

Egg The broody hen season is at Season. hand, and A FEW HENS' readers are in the market for

eggs for hatching. They have the money to invest, and it is "up to you" to strive for their trade. One feature of our field is that it is not overrun. The bulk of our poultry readers take no other poultry paper. This is their paper, and you must advertise in these columns if you wish their trade.

A FEW HENS has been cultivating this field for almost five years. It has kept down the weeds and made the soil rich and fertile.

A Few Hens is the journal for beginners. It is a Kindergarten in the poultry business. It is a business maker. Wide-awake poultrymen found this out years ago—they profited by the discovery—they are still enjoying the good results.

We are in an age of lively competition. Probably no business has such a strong following as poultry breeding. A long list of breeds, and an equally long list of breeders, are waging a business war. It is not only necessary to have the best goods, but it is equally necessary to afford the best treatment to catch business. Buyers are wide-awake, and the advertiser must be up-to-date to do business with them.

Briefly put, A FEW HENS is an up-todate journal; it has wide-awake readers; and it offers golden opportunities to reliable advertisers. The fact that you are advertising in A FEW HENS adds to your reputation—to our readers it means reliability.

When can we expect your orders?

Poultry in England. The following letter has just been received from Robert A. Colt, Waltham

Robert A. Colt, Waltham Cross, London: "A Few Hens arrived safely, and I distributed them, as promised. Several of them said that they would write direct to the publishers and subscribe for same.

"The fact of the matter is that there is not a first-class up-to-date poultry paper published in England, Ireland or Scotland.

"The week before last, I saw the largest manufacturer of poultry houses in the Kingdom, and he is very anxious for me to join him in starting one, but the greatest trouble is, we know of no

one in this country fit or suitable to take the Editorship, as it seems what they do not know about poultry would fill a much larger book than has ever been bound. As an editor and a very prominent writer of the press said he liked the hot-water machines much better than the hot-air. I asked him why. His reply was, because he got more moisture from the tank. That made me smile much more than the "Cheshire Cat" ever did. I assure you that it is very laughable indeed to hear some of these lecturers and poultry experts talk on the question of incubation.

"Old Cooper did not come over on account of the illness of Mrs. Nix, together with the delay of getting out his catalogue

"We made the three finest shows ever put up in Europe, at the Dairy, Crystal Palace, and the Grand International at Alexandra Palace, all three in London. The one at the Crystal Palace was without doubt the finest exhibition ever made in the world, and at the Grand International we made the largest exhibition of incubators and rearers ever made in the world, beating the big show made by Breck and Cooper by one machine, but large enough to say so.

"We now have five lots of goods on the way to South Africa. We are corresponding with the head of the Agricultural Department in Russia; also there is being built in Russia from plans received from the Prairie State Incubator Co., brooding houses, capacity 8,000 chickens, and incubator room combined. I met the gentleman three or four times, and during our conversation I asked him the size of his farm. He smiled and said, 150,000 acres, divided into 52 farms, besides the home one; a trifle more land than we require after death.

"We also have sent goods to India, and through a party here we have twelve representatives in India and China. Norway has bought from us several lots of goods.

"We are in correspondence with a party in Hungary to take up our agency in that country.

"The week before last we closed a contract with a very large concern in Brussels to act as our agent throughout Belgium, and the dictator with our Mr. Spencer (the Secretary) leaves tomorrow night for that City, to assist our agent to make an exhibition at the largest poultry show ever held in Belgium, the dates of which are the 22nd, 23rd and 24th. We are taking 19 machines with us.

"We are selling our machines to the best known chicken men in this country. A Mr. F. S. Noon, who has been in the States some twelve years, most of that time in the chicken business, has connected himself with a company with plenty money, at King's Heath, near Birmingham. We have sent him thirty odd machines. In a letter received from him yesterday, he writes us that they are going to increase very largely. I might say that the company has six or seven shops, and he has started to raise 20,000 chickens to supply the different shops, and as fast as possible he will increased his out-put. So far he has certainly had remarkable luck for

this time of year. I was there a week ago Sunday, and saw him take out 396 chickens from 426 eggs.

"The fact of the matter is, old man, that our business has increased so rapidly that I have not felt justified in leaving the office to make the trip that I intended throughout Ireland, Scotland and England, but that will come in good time.

"If you will look on page 16, of the new Prairie State catalogue, you can get some idea of our exhibition at the Dairy Show. The Lord Mayor, Sheriffa, and other dignitaries, spent 15 minutes at our stand, and I assure you that we considered it a very high compliment, as it was the only one of the kind that they visited.

"Since the picture was taken, we have found it necessary to take two buildings very much larger than the one we had at that time.

"But enough of ourselves."
With best wishes, we remain,
ROBERT A. COLT.

Good E. P. Tabor, Jr., Long-neadow, Mass., writes A FEW HENS: "Below I give egg record for January and February, of eighteen hens and pullets. There are in the pen five White Wyandotte hens, six WhiteWyandotte pullets, four Barred Plymouth Rock hens, and three Black Langshan pullets. In January, four Wyandotte hens laid a total of 45 eggs. Five White Wyandotte pullets laid 88 eggs, two Plymouth Rocks laid 30 eggs, and three Langshan pullets laid 45 eggs. A total of 208 for the month from fourteen layers.

"In February, five Wyandotte hens laid a total of 42 eggs, six Wyandotte pullets laid 94 eggs, four Plymouth Rock hens laid 38 eggs, and two Langshan pullets laid 36 eggs, making a total of 210 eggs for the month from seventeen layers

layers.

"Total number of eggs for the two months was 418. These were sold for \$12.10, and feed for the same length of time cost \$3.15, leaving a profit of \$9.05.

"Do you think this is as good as the average? This has been an unusually poor Winterforeggs. I know of several who keep a hundred hens or more, and yet have not got eggs enough to pay the feed bill."

Hens With C. F. Cole, Plymouth, Names Lay. Mass., writes: "From twenty-five pullets and one hen, we have had thirty dozen, lacking four eggs, ranging from five on the third to seventeen on the twenty-ninth

and thirty-first.

"They are May pullets, and the first egg was laid December 2nd, by Black Beauty, one of my favorites. She is a very large, black hen, with a top single comb, and lays nearly every day a large brown egg. We might go on and give names and peculiarities of each.

"We have two Buff Rocks, one White Wyandotte, five Rhode Island Reds, and the rest mongrels, the latter having considerable Rhode Island Red blood, and some Leghorn blood in them.

"We have a Plymouth Rock cockerel that scored 90 1-2 at the Plymouth Rock

"Hens with names will have a clean, dry, warm place to sleep in, where in January they spend over half of their time. Every morning we brush off and remove the droppings to the lawn.
"The fowls no doubt feel as comfort-

able 3 their owner feels satisfied, when they are stowed away for the night.

"Hens worthy, in the estimation of their owner, of names, will have one good, warm meal a day in this cold weather. They will have a covered place in which they can enjoy them selves scratching over the hay, dry leaves or straw, to find the corn or wheat which has been scattered there.

"They will have a variety of food and plenty of it, even if grain is high. It will be given in the right proportion, or as near that proportion as good authority and the judgment of the owner can determine.

"Besides the grain and table waste, cut clover, a turnip or cabbage hung up, scraps, ground bone, grit, oyster shells, powdered charcoal, and possibly, if a brook is not too far away, a little water cress as a choice bit.

"The snow will be cleared away from the shed, and the door opened on fairly warm days, and when the ground be-comes bare, as it sometimes does in New England, even in January, a run over the dead grass for a little while will be allowed.

"It is quite a tax at this season for Mistress Biddy to get up a dish so complicated as an egg, even every other day, and to keep up her name she must have every advantage.

"These fowls will never lose a meal, because their owner feeds them first in order to enjoy his own meal.

"Have we not answered the question, what is the road to large success in life in any direction.

"The good shepherd calleth his sheep by name and the sheep knows his voice."

Editorial Austin Long, Pittsburg, Kansas, writes: "From a pen of twenty-six com-Chit-Chat. mon hens, with a mixture of about onefourth Rose Comb Brown Leghorn blood them, I received, during 1901, one thousand, nine hundred and fifty-six eggs, an average of a little better than 153 eggs per hen. From a pen of fifteen half-bred Single Comb Brown Leghorn hens twelve hundred eggs are average. hens, twelve hundred eggs, an average of eighty eggs per hen. Of course, I set every hen that becomes broody, and that puts the full-blooded Leghorus in the lead, for they do not want to set. I am doubling up on my stock every season. I believe in growing into the business instead of going into it. I got my pointers from A FEW HENS years ago. In picking out my stock for this year, I selected thirty-two of the best formed, and near the Standard as I could. Then from these I choose twelve of the best to breed from, and the rest will be used for market laying. I never used trap nests, but expect to give them a trial in the near future."

H. G. Doonheim, Somerton, Pa., writes: "I have ten, year-old hens, and sixteen pullets, a mixture of Barred Plymouth Rock, Light Brahma and Leghorn. I have them in one flock, and keep three fairly good Barred Plymouth Rock cocks running with them. During January they laid sixteen and two-thirds dozen eggs, and during February nine-teen and three-fourths dozen.

"On the 18th of January I set one of the hens, giving her thirteen eggs laid by this flock. I did not know by which hens they were laid, but picked out only nicely shaped eggs. On the morning of February ninth I had thirteen chicks

from them. How was that for fertility? "I brought the hen with the chicks into the kitchen, placed them in a large box turned on its side, and closed the front with a window sash and a window frame covered with wire netting. During the first week I fed them on Chick Manna, and since that with corn meal and bran mash, granulated oats, millet seed, cracked corn and Fidelity Food. They have good, healthy appetites, and are all as chipper as can be, being three weeks old tomorrow. Not even the lack of luck supposed to be attached to their number, seems to have a bad effect on

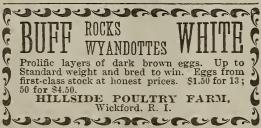
"Two other hens have been broody since, but their intentions did not seem to be sufficiently serious to be intrusted with eggs; they are now laying again.

"Little Chicks," is the happy title of a 144-page book just issued by the Ex-celsior Wire and Poultry Supply Com-

what Mr. Poyer says of Hanaf ord's Wachusett Strain White Wyandottes, Page 108, February 15th issue A FEW HENS, also my ad. last page of this paper, and if you waut lots of Browu eggs, next Nov., Dec., Jau., send me your order for eggs now.



THE IDEAL BROODERS. Indoor, Outdoor, Sectional. \$5 up. Central heat. Absolutely sure supply of warmed fresh air under circular hover. Best yet. Ideal Brooder Co., East Mansfield, Mass.



LARGE WHITE ROCKS

(Hawkins-Kulp strain) and S. C. Brown Leg-horns (Kulp-Dorsey). Heavy layers; farm raised, Ideal trap nests used. Eggs 15, \$1.00: 100. \$5.00. FRANK HARVEY, Box 7, Lansdowne, Md.

pany, 28 Vesey Street, New York City. The work is edited by Michael K. Boyer, and contains essays on the subject by all the leading poultry writers. It is the most complete book on a single sub-ject in poultry work that we have yet seen, and fills a place in poultry litera-ture too long left vacant. It is a treatise giving hints on the successful care of chicks, by both natural and artificial methods.

With the March issue of the Ohio Poultry Journal, of Dayton, Ohio, that estimable publication closes its eighteenth year of existence. The Journal first appeared April, 1884, and after the first year's struggle it began to thrive under the management of our old friend, Col. Robert A. Braden. After the Colonel was enabled to store barrels of money away in his cellar, he turned the prop-

RHODE ISLAND RED EGGS \$1.50

100 for \$4.50; 500, \$21; 1,000, \$40.

To accommodate customers who want to try the utility qualities of Rhode Island Reds, who care nothing for color of plumage or the kind of comb, and who judge a breed solely by the contents of the egg basket, and by the dressed stock on the block, we will sell eggs from COMMON UNIMPROVED EGG FARM RHODE ISLAND RED HENS MATED to MALES OF OUR BEST BLOOD at the above prices. They are located in colony houses scattered over pasture land, and have three or four young males to every forty hens. They are not confined in yards, but have free range on grass every pleasant day. Eggs will be of good size and color, and have thick shells. There is, however, as much difference between this sort of stock and our best bred strains, as regards beauty of plumage and uniformity in breeding, as there is between any mongrels and the modern pure breeds. If you want good lookers with generatious of careful breeding back of them, buy our eggs. Single Comb or Rose Comb variety at \$5 for 15; \$8 for 30; \$20 for 100. Circular free.

SAMUEL CUSHMAN & COMPANY, deWOLF FARM, PAPPOOSESQUAW.

SAMUEL CUSHINAN deWOLF FARM, PAPPOOSESQUAW. Bristol, R I.

SINCLE COMB WHITE LEG-HORNS. Bred for business. Extra large size and fine layers. Eggs \$1 per 15; \$5 per 100.

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SINGLE COMB

I have a fine pen of them. Bred especially for laying. Good size, shape and color. If you look for layers order eggs for hatching from me. \$2.50 for 50 eggs; \$4 for 100 eggs; \$35 for 1000 eggs. Prompt shipment and 75 per cent fertile guaranteed.

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EVERY BOY HIS OWN TOY MAKER.



Tells how to make all kinds Toys, Steam Engines, Photo Cameras, Windmills, Microscopes, Electric Telegraphs, Telephones, Magic Lanterns, Eolian Harps, Boats, from a rowboat to a schooner; also Kites, Balloons, Masks, Wagons, Toy Houses, Bow and Arrow. Pop Guns, Silngs, Stilts, Fishing Tackle, Rabbit and Bird Traps, easily make them. 200 handsome illus. This great book by mall 10c, 3for 25c, G.E. DEPUY, Pub, Syracusc, N.Y.

erty over to J. C. Ely. While in this change the poultry world lost sight of the benign countenance of Col. Robert, it gained an equally congenial companion in Editor Ely, and under the latter's supervision the magazine is making rapid strides. A FEW HENS extends congratulations, and, in the language of Rip Van Winkle: "Here's to your health and family's; may you live long and prosper!"

Jokes seem to be in order about the office just now. A young man called and informed us that the indications were that eggs would be too plentiful next year to yield any profit. "Why," we innocently asked. "There are signs of an over-production," he said, "as a hennery (Henry) has been imported from Germany." We collapsed.

"Eggs are as scarce as hens' teeth in Germany," yelled a delinquent subscriber, as he entered the office. "Why so?" "Because she sent her hennery (Henry) to America." We fired the ink stand at him.

Billy Welsh appeared about that time and said he had a joke. "Get out," we demanded, "those Dutch Henry jokes are stale." "No, this is a new one all right." "What is it?" "Listen:

The following story is told of a dinner given about Faster time last at all it."

given about Easter time last, at which were a number of ladies and gentlemen. At each plate was an egg, as a sonvenir -candy eggs, of course. One of the ladies in looking at her souvenir, dropped it upon the floor. Turning to the gentleman sitting beside her, she exclaimed: 'O, my! I have dropped my egg; what shall I do?'

The answer of her gallant was brief. It simply was:—
"Just cackle."

An exchange says: "At Warsaw, Poland, they hold a goose market every year, in October. The geese, about 3,000,000 in number, are driven to Warsaw from all parts of the country. Many of them come from distant provinces, and, as a consequence, have to travel many miles over roads that would wear out their feet unless some means were provided to protect them. This is done by driving them through tar poured upon the ground, and then through sand. The operation is repeated several times, and by the time they are ready to start, their feet are completely covered with a hard crust which effectually protects them from injury.

A. F. Hunter has resigned his position as associate editor of the Practical Farmer, of Philadelphia, Pa., and has moved to Buffalo, N. Y., to be near Mr. Curtis, the proprietor of the *Reliable Poultry Journal*. He will be Mr. Curtis' "right hand bower," and practically in control of the editorial department of that paper.

The associate editors of the Reliable Poultry Journal are resigning about as rapidly as President Roosevelt's cabinet. Mr. Pollard is managing a millionaire, and Mr. Hewes is going to try his luck · т oultry newspaper owner.

WHITE Wyandotte eggs.—\$1 per sitting. Three, four and five cts each by the 100. Directions given for making winter layers. E. T. Damon, Lancaster, Mass.

About Broilers and Roasters.

In scalding poultry see that the water is not too hot.

Much is lost by careless dressing and handling of poultry.

Capons are always in constant demand in the Winter and early Spring season. The demand is greater for two and onehalf and three and one-half pound chickens than larger ones.

If the skin rubs off on scalded poultry, there is a patchy appearance to the carcass that hurts its sale.

The capon will put on from twenty to thirty per cent more flesh and fat than the rooster in a given time on the same amount of food.

In dressing capons for market, be sure they are fat, and do not kill until crops are empty. A thin capon is not as good as an ordinary chicken, because if not large, or a proper capon, they are not wanted as capons or chickens either.

The Gazette, of Lancaster, N. H., says: "It is estimated that the United States consumed 54,000,000 pounds of turkey on Thanksgiving Day. This is the equivalent of six thousand carloads of one thousand birds per car, equal to a train forty miles long. The latest fad in the East is 'broiler turkeys,' weighing about two pounds apiece, and costing from 75 cents to \$1 each." This last paragraph may be true, but we did not see any such around Boston market. Do they mean in China or India? We did not know that they were sufficiently civilized to eat turkey.

Colorado is making a reputation on poultry raising, as well as Rocky Ford melons. Denver Field and Farm says that during 1901, Denver consumed 6,050,000 pounds of dressed poultry, representing a value of \$600,000. During the year 300,000 cases of eggs were consumed through Denver markets, and the eggs handled on the market were valued at \$1,500,000. Added to 8,000,000 pounds of poultry consumed in the State outside of the Denver market, the total value of poultry was \$1,000,000, and of the eggs marketed \$2,375,000. The value of poultry marketed in the State (outside of Denver) reached \$150,000, bringing the traffic in poultry and eggs up to \$3,900,000.

The best on the market, cut in one-eighth inch lengths and all long stems sifted out. The best and cheapest egg food you can buy. \$1.25 per 100 lbs.; \$5 per 500 lbs.; \$10.00 per 1,000 lbs.; \$20 per ton.

100 Red Belgian Hares, \$1 to \$2 each. 300 first-class White Wyandottes, yearlings and young stock, \$1 to \$2 each. Catalogue. Order at once.

C. A. STEVENS & CO., Box 7, Wilson, N. Y.



Poultry. Money in ARE YOU GETTING IT OUT?

You are not getting it all unless you use a

tarms Bone Cutter.

Our New No. 7 with ball-bearing, back-geared 3 to 1. is without exception the easiest running, most rapid cutting machine made. The Stearns CUTS the bone, reducing it to a fine granular meal, fine enough to feed safely to young chicks. Cuts meat, gristle and tresh or dry bone. Absolutely automatic feed and self regulating. Can't clog. We make eight other models for hand or power. Our new book, "How to Make Poultry Pay" sent to any poultry-raiser FREE. Write for it.

E. C. STEARNS @ CO., Box 5 Syracuse, N. Y

"Don't keep hens-make them keep YOU."

LEGHORNS S. C. PLY. ROCKS WYANDOTTES JAPANESE SILKIES \$7 a pair; \$10 a trio. No eggs.

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\$5.00 per 100. Good ones.

7.50 per 100. Sp'l pens.

3.00 a setting Exhibition.

SIMPKINS - POWERS,

YOUNGSTOWN, OHIO.

Why Not Get the Best.



Never goes out nor smokes. Price, 75c to \$2.70.

New Aluminum Regulator gives perfect control of heat.

Oakes' Improved Wafer Thermostats—the standard regulator. We manufacture incubator and brooder fixtures of all kinds, Tanks, Heaters, Egg Testers, etc. Write for catalogue and get our money-saving prices.



L. R. OAKES, Mfr., No. 2 6th St., Bloomington, ...

It is claimed it was a poor season for poultry, too, on account of a late, cold

and wet Spring.

In the vicinity of the cold storage houses in the West, a good demand has grown up for Fall-hatched chickens of broiler size. They are put in storage and sold as broilers from New Year to April or May. They do not sell at as high prices as the incubator-hatched chickens that come out in January or February, but they yield a fair profit to the grower and the storage house, says American Cultivator. But we think if the Eastern poultry keepers would produce and store them, or even keep them alive to be sent to market in the Winter, there would be a better profit for them.

While the ordinary broiler is rated at

three to four pounds per pair, few would object to them if they weighed twice as much, or be willing to pay the same price per pound, except the hotels that serve the half of a broiled chicken for an order, and charge as much as the whole chicken costs them. But there would be enough of those coming from the West, even if those who liked a three or four pound broiler could find what they wanted in our markets. We would urge upon the poultry raisers who have houses warm enough to raise chickens in the Winter, to try to hatch out some in October or November, keep them growing, and try to have them ready to offer in place of these cold storage chickens during this season. Once let it be known that such can be obtained that have not been in cold storage, and the demand will increase. A few are doing this now and make good profits, but with an increased supply would come an increased demand. The few dealers who handle them now scarcely care to let the fact be known excepting to certain special customers, who consider it a favor to get them at any price.

In Europe one finds capons on every side, and the grower of poultry would no more think of raising cockerels for market than of letting his Spring chickens grow old before killing them. The fact is, caponizing is understood better abroad, and in this country many growers, not being very familiar with the subject, will not take the trouble to bother with it, says C. T. White, in American Cultivator. Capous nearly always sell from one-half to double the price obtained for roosters, and the relative difference in their weight increases this difference. In six months the capons will gain from two to three pounds more weight than the average rooster, and at the end of a year this gain is increased from four to five pounds. It takes no more feed to secure this gain either. There is consequently four or five pounds of actual profit. In return for this the grower has to spend a little extra time in caponizing, which after all is a simple operation that calls for no great skill. Modern caponizing tools make this work so easy and simple that no one has any excuse for neglecting it. The meat of capons is always delicious. It is soft, tender and juicy, and there is usually little difficulty in disposing of the birds. Yet even if the market was glutted with capons, and prices fell to a level of those offered for roosters, every buyer would take the capon first, and the raiser would make more thereby than if he had raised roosters. He is still in pocket the difference between the average weight of the rooster and the capon. This amounts to two or three pounds in six month old capons, and four and five pounds in year-old birds. Surely there is no easier way to increase one's profit in poultry raising.

Dressing Poultry for Market.

In the poultry industry, as in every other, attractive marketing is an important feature, and one too often overlooked.

Many of the products marketed by the farmer do not realize high prices, owing to a lack of proper packing, or because some special requirement of the consumer is not complied with.

The Canadian Experiment Stations have devoted considerable attention to the poultry industry. Special efforts have been made to learn the requirements of the English market.

In a recent report of a Canadian Commissioner of Agriculture and Dairying, the methods of dressing, packing and shipping poultry for British markets are discussed. Some of the directions for shipping turkeys seem of general Among the principal application. points are the following:

BLAIRSVILLE INCUBATORS Standard High-Grade Machines Thousands in successful operation. Scientifically constructed; self regulating; perfect ventilation; even distribution of heat; simple; safe; durable; graceful in appearance; easy to operate and will hatch every fertile egg, producing strong, healthy chicks. Mistakes cost money, take no chances, but buy an Incubator that never fails and is as near perfection as can be attained. Our Brooders are the best. Catalogue free.

THE BLAIRSVILLE INCUBATOR CO...

WHITE Wyandottes exclusively (Hawkins strain). Eggs for hatching \$1.00 per 13, from snow-white stock. Louis Heller, Bridgeton, N. J.

FORMULA for Egg Producer, Lice Killer, Whitewash, etc. Send 25 cents for same to C. P. PUNCHARD, Framingham, Mass.

Varieties Choice Poultry, Eggs, Pigeons and Belgian Hares. Incubator Eggs \$40.00 per 1,000. Always Choice Stock to offer. All described in our colored descriptive 60-page book, and mailed for 10 cents, J. A. BERGEY, Telford, Pa.

Evergreen Poultry Farm.

White Wyandottes, R. and S. C. R. I. Reds. Prolific layers of brown eggs. Eggs \$2 per 13; \$3.50 per 30. Correspondence solicited. Satisfaction guaranteed. Circulars free. A. H. Germond, Stanfordville, N. Y.

POULTRY PLANT FOR SALE. Complete poultry plant and fine residence on D. L. & W. R. R. Good city markets. W. T. Hackett, Scranton, Pa.

NIAGARA FARM

BUSINESS STOCK

Is what you want. White Wyandottes and Pekin Ducks. Breeders \$2 each. Eggs guaranteed 75 per cent. fertile, after March 1st \$1.50 per 13; \$4.00 per 50; \$7.00 per 100. Red Belgian Hares \$1.00 each. Green Cut Clover \$1.20 per 100; \$5.00 per 500 pounds. Poultry Supplies. Circular and list of awards free, Egg Baskets. W. R. CURTISS & CO.,

Box 2, Ransomville, N. Y,

Plucked turkeys are regarded as more salable than the unplucked.

Fast the birds for twenty-four hours, to empty the crop and intestines. The fermentation of food in the crops and intestines will wholly spoil the birds. Give a small quantity of water just before killing.

Kill by wringing the neck, and not by

knifing or sticking.
One dealer says the easiest and best mode of killing is by the dislocation of the neck. This manner of killing is generally adopted by the English and continental poulterers. It is done as follows: Grasp the legs of the bird in the left hand, and the head of the bird in the right hand, the back being upward and the crown of the head being in the hollow of the hand. Hold the legs of the bird against the left hip and the head against the right thigh or knee. In this position strongly stretch the head, at the same time bending it suddenly backward, so as to dislocate the neck near its junction with the head. The bird is

FOR SALE. Buff Plymouth Rock eggs, for setting, from birds that score 90 and over, at \$1 per 13. Also 3 or 4 high-scoring cockerels at reasonable prices. W. L. Mann, 21 Highland St., Orange, Mass.

ORDER EGGS NOW
from prize-winning Buff Rocks and Buff Wyandottes. \$2 per 15. S. C. White Leghorn eggs, \$1 per 15; \$4 per 100. Free circular. Seud for it.
HENRY R. INGALLS, No. B, Nortonhill, N. Y.

HIGH CLASS LIGHT BRAHMAS. layers (trap nests used for three years) \$\mathscr{g}\$ pens of heavy \$2.50 per 50; \$\mathscr{g}\$\$.50 per 10; \$\mathscr{g}\$\$.50 per 10; \$\mathscr{g}\$\$.50 per 200. PHILIP H. GEORGE, Box B, Braidwood, Illinois.

FREEMAN'S WHITE WYANDOTTES

are bred to lay eggs in winter. 214 eggs average by one pen in one year. 278 eggs laid by pullet in same time. Brown eggs for hatching from grand birds, \$1.25 for 15. Geo. H. Freeman, Hallowell, Me.

Central Poultry Yards, WHITE WYANDOTTES.

Brown egg strain. \$1.25 per sitting of 15. Box 633, Hammonton, N. J., CHAS. K. NELSON, Prop.

Buff Orpingtons,

Buff Plymouth Rocks, Black Minorcas— fine birds,—and very White Wyandottes. Young stock for sale and eggs in season, at moderate prices. Address, Mrs. A. P. ELLIOT, South Hadley, Mass.

BROILER EGGS.

White Wyandottes, B. P. Rocks. \$4 per 100. Large size stock. Grace J. Day, Greenfield, Mass.

Poultry



With the Marker here illustrated, any form of mark may be adopted by punching the web between the toes. A complete record of chicks from different parties and strains can thus be kept, as well as to know your birds wherever they may be. It may save you money and a valuable bird. It costs, postpaid,

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I. S. Johnson & Co., Boston, Mass.

killed instantly, and the plucking of the feathers must be proceeded with at once.

The method of killing turkeys in Nor-folk is also recommended. It is as follows: The bird is hung up by its legs, the wings being crossed to prevent struggling. Next it is given a sharp blow on the back of the head with a stout piece of wood, which renders it insensible. The knife is then inserted into the roof of the month, so as to pierce the brain, cutting it along the entire length. The bird is left hanging by the legs for a few minutes to allow the blood to drain out. Pluck at once while still warm.

Feathers should be left on the neck for about three inches from the head; also a few feathers on the tail and tips

Do not tear the skin in plucking, and do not under any circumstances dip the bird into water.

Remove the intestines from the rear. Care must be taken not to break the gall bag. All the rest may be left inside. Twist the wings on the back of the bird. A string, which, however, should not encircle the body, may be used to keep them in place. As soon as the feathers are off, hang the bird up by the feet to cool. Do not lay it down or hang it up by the head. The blood should drain toward the head and become coagulated there.

One dealer says to lay the birds on their breasts on a setting board, pressing the rumps square, letting the head hang down until the body is set, when the birds will always retain their plump shape.

Cleanliness is necessary. The feet and legs of the dressed birds should be clean also.

The legs of the birds are often tied up. If the birds are to be displayed in a shop, the head should be pushed up under the wing.

The birds should be thoroughly cooled (not frozen), and they should be cold through and through before being packed in cases. Pack in any one case only birds of nearly the same weight, graded to within two pounds.

In no case should any bird be lighter than the lightest weight nor heavier than the heaviest weight marked on the package.

Pack the cocks and hens in separate

Mark the cases at both ends plainly. Wrap every bird neatly in paper.

The head of each bird should be wrapped with a quantity of thick paper, to absorb any blood.

Spread a small quantity of wood pulp, or dry, clean straw in the bottom of the case.

Put paper on the bottom and top of the birds to keep them clean. A small quantity of wood pulp, or dry, clean straw may be put on top, directly under the cover. Pack the birds with backs down, with heads at one side. Put from twelve to twenty-four birds in a case. Every case should be packed quite full and close to prevent damage during transit. Do not export any old, tough birds. Every bird should

show a good, plump, white, broad

Opinions differ in the United States regarding the practice of drawing the poultry before marketing. While it is desirable to suit the demands of the market to which the shipment is made, the following conclusions from recent American experiments are of interest:

Under precisely the same conditions of temperature and humidity, drawn fowls will keep from twenty to thirty days longer than those not drawn. The presence of undigested food and of excrementitious substances in animals which have been killed, most certainly favors tainting of the flesh and general decomposition. The viscera are the first parts to show putrescence, and allowing these to remain within the body cannot do otherwise than favor infection of the flesh with bacteria and ptomaines, even if osmosis does not actually carry putrid juices to contiguous tissues. Hunters know the value of drawing birds as soon as possible after they have been shot, in order to keep them sweet and fresh, and to prevent their having a strong intestinal flavor.

That the opening of the body of an animal, and exposing the internal surfaces to the air may have some influence of itself in hastening putre-

faction, is admitted, but when the process of drawing is properly conducted, this secondary objection to its immediate performance may be entirely set aside. Absolute cleanliness should be maintained throughout the operation, and if the entrails are torn and their contents allowed to come in contact with the flesh of the animal, its interior should be at once washed out with clean, cold water, and afterwards with a solution of common salt, and the carcres hung up until thoroughly dried.

VERMONT MAPLE SYRUP. Warranted pure. \$1.20 per gallon. Order early. Lee Shortt, Lower Cabot, Vt.

CHADY LAWN FARM fills orders for incubator eggs promptly, from Barred Plymouth Rocks, Rhode Island Reds, S. C. White Leghorns. \$4 per 100; \$35 per 1,000.

J. O. GABRIEL, Shelly, Pa.

WYANDOTTE

EGGS 75c. PER 13; \$3 PER 100. W. Bromley & Son, Dudley, Mass.

Greider's Fine Catalogue

of prize winning poultry for 1902, printed in colors, illustrates and describes 50 varieties of poultry; vives reasonable prices of eggs and stock. Many hints to poultry raisers. Send 10c in silver or stamps for this noted book.

B. H. Greider, Florin, Pa.



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Sold at a low rate and guaranteed in every way. We have a new catalogue fully illustrated and filled with happy thoughts on question of Poultry Culture. Published in 5 languages—5 separate books. English edition, 154 pages, 4 cents postage. Others 80 pages, free.

Des Moines Incubator Co., Box 423 [Des Moines, Iowa. or Box 423 Buffalo, N. Y.



Dropped on sugar it is pleasant to take to cure many common ills, Internal and External Price 25 and 50c. Book Treatment of Disease sent free. I. S. JOHNSON & CO., Boston, Mass,

The Domestic Goose.

The following, taken from the report of Frank H. Mason, Consul-General at Berlin, will be of interest to goose

growers:

The domestic goose holds about the same honored place in the nutritive economy of Germany, that the more delicately flavored and patrician tur-key does in that of the United States. It is the standard luxury of the German people, and during nine months of the year forms the principal feature of the table, at festive as well as everyday entertainments.

Although every German village has its flock of geese, and notwithstanding the great numbers that are bred and fattened at farms along the banks of rivers, ponds and small lakes, the home-grown supply fall far short of the constant demand, leaving a large annual deficit to be filled by importations, which come mainly from Russia. The season for this traffic is now at its highest, and the receipts of Russia, at the Rummelsburg station, in the southeastern quarter of Berlin, average about 15,000 daily. A special goose train of from fifteen cars on ordinary days, to thirty-five or forty on Mondays, brings the birds from the Russian frontier. The cars are specially built and rigged for this service, and carry each about 1,200 geese.

Immediately after arrival, the whole train load is inspected by a corps of sanitary officials. The fat ones are then distributed among the dealers and market men, while the others— and these include the vast majority are sent to be fattened at farms and feeding establishments in the outlay-

ing provinces.

The inspection is exceedingly rigid. If a single goose dies en route, or is found sick with any disease that can be communicated to others, the whole carload is placed in quarantine eight days. Should another goose die during this period, the whole lot is placed in quarantine eight days longer, at a cost of 2,000 marks (\$476), whereby the loss to the owner becomes so enormons that he is driven to the most extreme care and precaution in all future operations of the same kind. This is the real object of the systemto make the penalty of introducing diseased birds so severe as to render such practice ruinous to perpetrators.

In certain cases, where the evidence of neglect of infectious disease is not conclusive, the lot is taken to the city abattior and killed under supervision of the sanitary police, after which such as are found to be free from disease are released for sale at a special auction held in the central market hall, whence the trade men "auction geese," which applies to those which have been slaughtered under police supervision. Those which show no trace of disease, but have been unavoidably injured in transit, and are otherwise in good condition, are cailed "Bracken," and are sold to certain dealers who retail them for reduced prices at a special market place, where the poorest and most frugal Berliner can find something adapted to his purse.

The aggregate wholesale traffic in geese at Berlin, amounts annually to nearly \$2,000,000. To the ordinary observer, all geese are very much alike, but the expert dealers here divide the Russian birds into twenty-one different breeds and categories, which now command in the Berlin market, according to species, age, size and conditions, wholesale prices varying from 43 to 63 cents each, though the prices advance with those of other poultry, as the season lengthens from Autumn to Winter, the great climax of the trade being just before and during the Christmas holidays, when goose in every form, from the plain "Gaesenbraten" of the laboring classes, to the pate de fois gras of the epicure, dominates the tables of the festive season.

Diseases-Remedy and Prevention.

Dampness is the Root of Many of the Poultry Ailments—Always Aim to Have the Quarters Dry.

Cure the cold.

Filth is a disease breeder.

Health is wealth in the poultry yard.

Texas Farm and Ranch very truthfully
says: "If the disease proves fatal, it may be cholera. If the fowl gets well or is 'cured,' it is something else."

The best method of checking sore head, if caused by impure or impoverished blood, says Michigan Poultry Breeder, is to confine the afflicted fowls in dry, shady coops, and wash the heads in

PRIZE STOCK and EGGS at farmers prices.
All Standard varieties, bied for utility and points.
Fine catalogue free. J D. Souder, Telford, Pa.

PURE BRED R. I. REDS. Can furnish sittings of 15 eggs for \$2; two sittings for \$3.25. Your orders solicited. Also White Leghorns at same prices. J. M. BASOM, Coolville, Ohio.

BARRED and W. P. ROCKS and WH. WYANDOTTES.

Pure bred stock only, for 20 years, and the best this year I ever owned. Eggs, such as I set myself, 13, \$1; 50, \$2.50; 100, \$4.50. E. D. Barker, Westerly, R. I.

STAY WHITE WYANDOTTES. Of course Shoemaker breeds them. He will ship you eggs that test 75 to 90 per cent fertile, from extra fine pens and best strains. Satisfaction guaranteed. \$2.00 for 15. For incubators \$5.00 per hundred. W. E. SHOEMAKER, Laceyville, Pa.

White Wyandottes

Can furnish you with eggs for hatching from choice stock (Duston strain) at \$1.00 per 15. Fertility guaranteed. GEO. L. HOYT, South Salem, N. Y.

WYANDOTTES WHITE Hawkins strain. Eggs, 15 for \$1; 30 for \$1.75; 50 for \$2.50. Breeders selected by trap nests. Record for 1901, 208 eggs. J. S. PAIGE, Athol, Mass.

POULTRY FARM

Capacity 1,500 layers. Six acres. Good markets. 120 foot brooder house. 350 foot laying house. All appliances and a great chance. Cheap at \$2,500.

Lock Box 9, Ransomville, N. Y.

Black DIAMOND LICE POWDER kills 'em all-even those it don't reach. Sample pound (by mail) 40 cts; six (by ex.) \$1.00. Erie Poultry Farm, Box 168, Crittenden, N. Y.

YANDOTTES. WHITE.-BUFF.

Choice Stock. Great Layers. Brown Eggs. EGGS FOR HATCHING, J. F. MOOAR, \$2.00 per 15; \$5.00 per 50. Hyde Park, Mass.

warm water and castile soap, drying the same with soft flannel and anointing with carbolized vaseline. Feed lightly on stale bread soaked in milk, into which is mixed a pinch of pulverized sulphur. Add a few drops of tincture of iron to the drinking water, and a cure will be affected in a few days. Feed sulphur, and give iron in the water to the well fowls, and disease will be checked. If the sore head is caused by mosquito bites, which becomes poisoned by the dew, drive the pests from the poultry house by burning sulphur on an old tin plate in the house just before the fowls go to roost. A few handfuls of pennyroyal, burnt, will also keep mosquitoes from the house. Carbolic acid sprayed over the roosts will also help to keep them from annoying the fowls.



Sure Hatch: Hatches Sure,

is the verdict of thousands who use it. Made right and works right. Anyone can run them, because they run themselves. Anyone can own them, because the price is right. Machine a. d its work guaranteed for 10 years.

Our Little Hatchit

Incubator

Is a 75 egg machine, made on the same principle as the Sure Hatch, same material and construction throughout. After shatch is over, remove egg tray and the same nachine broods the chicks. For fancies or to those raising poultry on a moderate scale the Little Hatchit is unequalled. Guaranteed as above. Big catalogue full of photo views and houst poultry information. Sent free. When writing address nearest office. Sure Hatch Incubator Co., Clay Center, Neb., or Columbus, O.

PINE ROCK strain Light Brahmas. Eggs 20 for \$1.00. PINE ROCK POULTRY RANCH, Clinton Hollow, N. Y. N. A. Taylor, Proprietor.

FOR SALE. Ten-Acre Poultry Farm, two dwellings, 300 laying hens, stock and fixtures, cheap for cash.

J. F. CLARKE, West Southport, Maine.

S. C. RHODE ISLAND REDS, Barred
S. C. Plymouth Rocks, S. C. Brown Leghorns,
Light Brahmas. Eggs \$1.00 per 13.
J. ARTHUR RADDIN, Cliftondale, Mass.

Brookside Poultry Farms

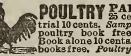
NELSON, PA., has fertile eggs. Each range only has ten to fifteen hens and cock separate. Nearly all varieties are located and cared for separately. Write for catalogue, all varieties, at once.

WHITE WYANDOTTES.

Eggs for hatching from superior stock. Heavy laying strain. Bred for business. Orders booked now. \$1.25 for 15. LAKE VIEW POULTRY FARM, JAMES H. ENNIS, Proprietor, R. F. D. Route No. 3, West Chester, Pa.

Scrubs Don't Pay

But my White Wyandottes do. Eggs from pro-lific layers. Strong, vigorous stock, at \$1 per setting. NATHAN WEST, Cobalt, Conn.



poultry PAPER, illust'd, 20 pages, trial 10 cents. Sample Free. 64-page practical poultry book free to yearly subscribera. Book alone 10 cents. Catalogue of poultry books free. Poultry Advocate, Syracuse, N.Y.

"Best Liver Pill Made." arsons' Pills

Positively cure biliousness and sick headache, liver and bowel complaints. They expel all impurities from the blood. Delicate women find relief from using them. Price 25 cts.; five \$1.00. Pamphlet free. I.S. JOHNSON & CO., 22 Custom House St., Boston.

ADVANCE TRAP NEST

Patented. Is guaranteed to work longer in a pen, where there is litter, than any other without cleaning Circular. W. Darling, South Setzuket, L. I., N. T.

THE CYPHERS \$12 OUTDOOR BROODER.

Herewith is shown a half-tone (made from a photograph) of the Cyphers three-apartment \$12 Outdoor Brooder, manufactured by the Cyphers Incubator Company, Buffalo, Chicago, Boston and New York. Next to its incubator, the Cyphers Company especially prides itself on its three-apartment outdoor brooder. Thonsands of them have been sold, and the manufacturers have received hundreds of testimouials, reporting success with it. When the right kind of an incubator has hatched the right kind of chicks, the battle is only half won. Next comes the brooders, and their work is fully as important as that done by the incubator. The real test of a brooder is not what the manufacturers say about it, but the work it does in the hands of persons who have bought it, put it to practical use, and marketed the chicks entrusted to its care. Herewith are brief extracts from a few of the many letters the Cyphers Company has on file received from customers during last season:

"Last February I bought one of your 120-egg incubators and one Style A Outdoor Proceeds."

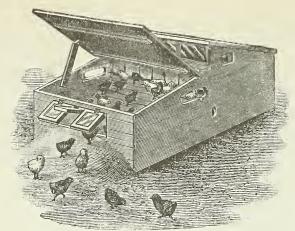
"Last February I bought one of your 120-egg incubators and one Style A Outdoor Brooder, and set the incubator going March 1st; on the twentieth of the month I had an incubator full of live chicks. I put them in the brooder, and although the rain fell most every day in March, April and May, I raised every chick hatched."—Geo. B. Riley, 72 Winfield Ave., Jersey City, N. J.

"I have placed as many as 100 chicks in your Style A Brooder till they were well feathered, and did not lose any. It pays to buy the best and I think you have it."—M. P. Seavey, Chicago, Ill.

"The Style A Outdoor Brooder I bought of you last year was a great success. I put forty-four chicks into it and raised forty-three."—J. E. Smith, Chestnut Hill, Philadelphia, Pa.

"I raised several hatches in the Cyphers Style A Outdoor Brooder, and lost only four chicks altogether, and they were the last to break out of the shell when hatched and were consequently weak. Lost more chicks from one lot running with hen than I did from all the brooder chicks."—H. A. Soule, Kingston, Mass.

"As respects your brooders, I would say that with the same number of chicks in them and under hens, I raised double the number in brooders that I did with the hens."—Otis A. Merrill, Pepperell, Mass.



"Your brooder is a fit companion for the incuchicks, and is run with a very small amount of oil. It is easily managed and can be relied on to do its work."—A. A. Brown, 286 Washington St., Quincy, Mass.

"Three and a half weeks ago I placed forty-three chicks in your Style A Outdoor Brooder, and all of the 43 are living and in good health. All of my neighbors are astonished to see how well they look."—John O. Hoeker, 1001 North Leavitt St., Chicago, Ill.

"The secret of success in raising chicks I think is first to get an incubator that will hatch strong, healthy chicks, and second, to get a brooder that will distribute the heat evenly and prevent crowding. You are fortunate in having both."—T. J. Illsley, Chicago, Ill.

Send today for elegant 180-page Complete Catalogue for 1902, describing in detail the above brooder, and the full line of Cyphers goods. Contains over 200 photographic views of America's successful poultry plants. Book weights one pound and will be sent to any address for ten cents in stamps or silver, to pay postage. Ask for book No. 29, and address nearest office.

Cyphers Iucubator Co., Cor. Court and Wilkeson Sts., Buffalo, N. Y. 325 Dearborn St., Chicago, Ill. 34 Merchants Row, Boston, Mass. 8 Park Place, New York, N. Y.

GROVE VIEW POULTRY FARM

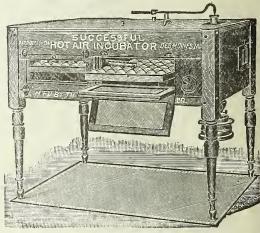
Eggs from large, vigorous birds, bred for heavy laying, shape and color. Barred P. Rocks, Rhode Island Reds and White Leghorns. \$1 per 16 (clear eggs duplicated); \$4.50 per 100. B.P. Rocks, vigorous e'k'ls, bargains at \$2. E. W. Harris, Reading, Mass.

Just a Moment!

Wm. E. Sargent, formerly of Lancaster, Mass., the originator of the Golden Egg strain of W. Wyandottes, won a fine reputation with this variety. Remember his famous cockerel "White Chief?" Well, I have several high-scoring sous and grandsons of this distinguished bird, and they have mates of equal quality. Eggs from these matings \$1.50 per 15; \$5 per 60. C. L. SARGENT, Pompanoosne, Vt.

THE "SUCCESSFUL" ABROAD.

If any person has an idea that the incubator business of this country is sleeping, or is not sharing in the "expansion" of American trade, of which we hear so much, it would be a good plan for him to drop into Des Moines and look into the factory of the Des Moines Incubator Company, where the "Successful" Incubators and Brooders are made and Brooders are made.



Your correspondent was astonished at the general activity about the place. It seemed that the great factory there, filled with busy workmen, ought to rnn out enough incubators to supply the world—and in fact, that's just about what the Des Moines factory is doing. Europe, Asia, Sonth Africa, South Anerica and Anstralia are drawing upon the Des Moines Company for machines, and the most gratifying feature of the growth of this foreign business is the fact that it has not been brought about by excessive booming or extensive advertising by the Company, but as a result of personal investigation of representatives of foreign firms, who have selected the "Successful" as the machine best snited for all climates and all conditions. The Company has on file in its office an unusually fine lot of letters from foreign customers, of which these may be taken as fair samples:

Dear Sir:—The Des Moines hot water incu-

Dear Sir:-The Des Moines hot water incu-Dear Sir:—The Des Moines hot water incubator purchased from your Company during last season, gave the greatest satisfaction. I found it very easy to manipulate, and although the printed instructions were often contrary to my ideas, I followed them out to the letter, with highly satisfactory results. I consider the incubator one of the best on the market, and would purchase no other. Yours faithfully, WILLIAM CHADWICK. Equitable Permanent Benefit Bldg., Land and Saving Inst.

Saving Inst.
Sydney, Australia, June 6, 1901.

Sydney, Australia, June 6, 1901.

In reply to your letter of the 1st inst., inquiring what success had attended my efforts in working the No. o Des Moines Incubator, I have to say that I had 90 per cent hatch from it, with my own eggs, and the machine is now running very smoothly with another lot, the result of which you will be advised. So far as I have goue with the machine, it has been quite up to expectatious. Yours faithfully,

CHAS. P. HARRINGTON.

Rock Lily, New So. Wales, Nov. 14, 1901.

Rock Lily, New So. Wales, Nov. 14, 1901.

Of course, these letters only confirm what thousands of Americaus have already said, but it is gratifying to note that other lands appreciate a good thing as well as we do, and that a good, honest machine, built on the right plan, of first-class material, by careful workmen, and sold at a fair price, will win favor and popularity at home and abroad.

Write for their catalogue today. The English edition contains 156 pages, and is sent for only 4c. postage. The German, Swedisl, French and Spanish books are sent free. Address the Des Moines Incubator Company, Des Moines, Iowa, or Buffalo, N. Y.

OneHen OneDay

It costs a mill a day—one cent every ten days—to make a hen a lively layer when eggs are high, with SHERIDAN'S CONDITION POWDER. Calcu-late the profit. It helps young pullets to laying maturity; makes the plumage glossy, makes combs bright red.

Sheridans POWDE

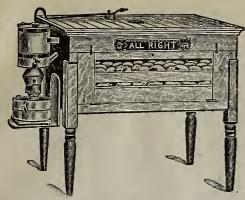
fed to fowls once daily, in a hot mash, will make all their feed doubly effective and make the flock doubly profitable. If you can't buy it we send one pack. 25 cts.; five, \$1. A two pound can, \$1.20. Sample poultry paper free. 1. S. JOHNSON & CO., BOSTON, MASS,

Many successful poultry raisers have learned by experience that the cause of a very bountiful supply of eggs in the fall and winter, when prices rule high, is proper care, feeding, and management, which they have learned by experience includes the use in the mash food, once daily, SHERIDAN'S CONDITION POWDER. It helps to mature young pullets so they will lay when five or six months old.

They Succeed

In keeping poultry for profit, who study cause and effect carefully.

No matter what kind of foods you use, SHERIDAN'S POWDER is absolutely necessary to cause the desired effect, namely, a well filled basket of eggs daily. It gets old hens over molting period quickly; it develops to laying maturity the young pullets. It causes perfect assimilation of the food elements needed to -effect growth, prevent disease, and produce eggs. Costs one mill a day per hen.



A FORTUNE IN A NAME.

A FORTUNE IN A NAME.

Under the keen and exacting conditions of modern business much more depends than formerly upon the name adopted for the business or the article offered for sale. We feel like congratulating the Clay, Phelps Incubator Co., of Cincinnati, Ohio, who are advertising with us, on the name "All Right," under which they are making and selling their incubators. We regard it as one of the happiest hits of recent years. We are glad to present herewith an illustration of this incubator, and refer our readers for fullest particulars to the very handsome catalogue issued by the Clay, Phelps Co.

One or two points we wish to call attention to. One is the plan on which they sell their machine—namely, forty davs trial. This is done to create the fullest possible confidence on the part of the public. If the manufacturer shows his own confidence in his goods, its bound to find its answer in greater confidence on the part of the buyer. We do not remember to have seen in any catalogue a clearer statement of the construction and advantages of an incubator, than in the "All Right" catalogue. A careful reading of these pages impresses one most favorably. In fact, it is hard to imagine how it would be possible to build a machine more conscientiously than the "All Right." Kiln Dried Poplar cases, double walled and extra well lined copper heating tauk, safety lamp of the most practical and approved pattern, and a regulator of great sensitiveness combine to make the machine a profit to the buyer as well as a pleasure to use. The catalogue is handsomely illustrated and is sure to interest and aid anyone who is about to buy an incubator. Write the manufacturers today, and get one of these books free. Address, Clay, Phelps Incubator Co., Cincinnati, Ohio, and mention this paper.

Comb Honey Not Manufactured.

Comb Honey Not Manufactured.

Comb Honey Not Manufactured.

A statement has been going the rounds of the press to the effect that nearly all the comb honey on the market is manufactured by a "cute machine," that the combs are filled with glucose and capped over by a mechanical process. The facts are, there is no such thing as manufactured comb honey anywhere in the United States, and in proof of this the publishers of leading beejournals of undoubted responsibility offer one thousand dollars for evidence to show that comb honey is manufactured, or that such an article is for sale in the open market. Although this offer has been out for fifteen years and has been duplicated by other responsible persons connected with the industry of bee-keeping, no one has seen fit to take it up. The United States Department of Agriculture has put out several published statements denying the existence of manufactured comb honey, and the American Grocer, the leading trade organ of its class, assures its patrons that all the comb honey on the market is absolutely the product of the bee.

GOOD THINGS FOR AGENTS.

GOOD THINGS FOR AGENTS.

The Reliable Remedy Company, of 497 Third Avenue, New York City, report an enormous increase in the sale of their specialties, including Eggs-Kum, Roupino and Scabicide, due in great measure they think to the value of A Few Hens as an advertising medium. The sales of Eggs-Kum have more than quintupled, and those of Roupino have nearly quadrupled. Of course, Scabicide is more of a summer seller, and there has, therefore, not been so marked an increase in its sale, although it has shown a gratifying increase. Agents are wanted at every post office in the United States, Canada and Mexico, for these sterling preparations, which the Reliable Remedy Company is now pushing vigorously. The demand for Eggs-Kum and Roupino has increased as it has, perhaps because of the fact that of the former but a small teaspoonful is given to thirty hens in the mash, while the latter, administered in the drinking water as a cure for roup, canker, etc., is so efficacious that the manufacturers declare their willingness to

let customers guarantee it in their own lauguage and then they will stand behind that guarantee, no matter how strong (within legitimate lines)

circulars, etc., will be furnished by the manufacturers or by any one of the following general agents:—Cyphers Incubator Co., Boston, New York, Buffalo, Chicago; J. W. Miller Co., Freeport, Ill.; Godbe-Pitts Co., Salt Lake City, Utah; Atlanta Seed Co., Atlanta, Ga.

Be good enough to mention A FEW HENS when writing.



SHOWS THE HEN

THAT LAID THE EGG.

Reliable, convenient, simple, inexpensive. This is the trap nest that you have been waiting for.

IT IS PRACTICAL.

Used in more large flocks, and endorsed by more practical users that know, than any other trap nest on earth.

Ideal Egg-Record Sheets, Ideal Aluminum Leg Bands.

The best of everything for the Record Keeper Circulars tree. Satisfaction guaranteed.

F. O. WELLCOME,

YARMOUTH, MAINE. formation and a contract

ROSE Comb Brown Leghorns, Kulp 242-egg strain.
Single Comb White Leghorns just as good, and large White Wyandottes, Duston strain. 15 eggs \$1,
Miss Ella L. Waltman, Laddsburg Pa,

Barred Plymouth Rocks

Thompson strain. R. C. B. Leghorns, Benedict and Kulp strain. Eggs in season, \$1 per 15; \$2 tor 35. Some very fine Leghorn cockerels, \$1 to \$3 each. RIVERSIDE POULTRY FARM, Box 81, Au Sable Forks, N. Y.

WHO SAYS utility White Wyan-Ours won their share of firsts and specials at Winter shows and Boyer's contest gave us first on eggs. Egg record 242—What more? Some fine dark eggs trom winners, \$2 per sitting. HOMESTEAD POULTRY FARM, Hopkinton, Mass.

WH. WYANDOTTE EGGS trom strong, vig-orons stock. Have yellow legs; are blocky in shape, and great layers. \$4.00 per 100. Order at once. C. A. STEVENS & CO., Wilson, N. Y.

S. C. WHITE LEGHORNS.

Bred for eggs as well as fancy points. \$1 per sitting of 13. Honest dealing guaranteed. Address, H. N. DINSEN, 117 Barclay St., Perth Amboy, N. J.

MINORCAS.

SINGLE COMB BLACK MINORCAS.

These birds lay the largest and whitest of eggs, and have been bred twelve years for heavy layers. Farm raised, vigorous, handsome.

Prompt replies to inquiries. Moderate prices. Catalogue free. Satisfaction guaranteed.

MRS. GEO. E. MONROE, Box B, Dryden, N. Y. Member Am. B. Minorca Club.

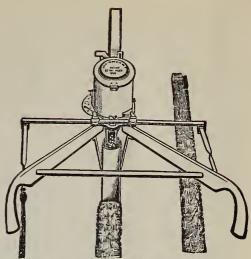
for Laying. Bred

White Leghorns, Buff Leghorns, White Minorcas. Pearl Guineas,

Brown Leghorns, White Wyandottes, White Guineas, Pekin Ducks,

Cornish Indian Games.

Eggs for Hatching, \$1.00 per 15; \$2.00 per 40 eggs JAMES M. SMITH, Perkiomenville, Pa.



New Universal Seeder at Work.

THE KITCHEN GARDEN.

Every farmer and villager who has a plot of ground at all suitable should have a Kitchen Garden, if for nothing else than to supply fresh vegetables for the table. Thousands appreciate the efficiency of the poultry yard as an adjunct to the home table as well as a money earner. The garden plot should go hand in hand with the poultry yard. There is no better garden fertilizer than that coming from the hen house, but the garden itself, how may it be best attended?

Put in the seed with a drill and every row will be straight and just right for easy after cultivation with a wheel hoe. You should not be without these most nseful tools even if you cultivate but one-eighth of an acre. With it you can do as much work in a given time as twelve men can do in the same time by older methods.

We are advertising in our columns the Matthews New Universal Hand Seeder and Cultivator, made by the Ames Plow Co., of Boston, Mass. This implement, with its various attachments, combines in one the Seeder, Wheel Hoe, Cultivator, Rake, Plow and Marker. It is a wonderful labor saver, and will pay higher dividends on its cost than almost anything one could think of. These people also make separate implements for all gardening work on large acreage of Onions. Beets, Spinach, etc. Send at once for their 1902 catalogue describing some twenty-five styles of these implements. Address Ames Plow Co., 71 Market St., Boston, Mass.

The letter printed below, received by one of our advertisers, doubtless confirms the experience of hundreds of our readers.

ence of hundreds of our readers.

Ironton, Ohio, February 22, 1902.

Mr. E. C. Stearns, Syracuse, N. Y. Dear Sir:—
Please send me your Bone Cutter catalogue for 1902. I gave my 1901 catalogue away. I am more than pleased with the No. 4 Bone Cutter I purchased from you last summer. I began feeding Cut Bone about Novem ber 1st, and in December I received 110 eggs from my ten bens, and in January I received 142, and I will do as well or better this month, although there has been ice and snow on the ground constantly for a month. My neighbors who keep chickens don't get an egg, and I wouldn't either, if I had not fed cut green bone. Eggs have been selling for 30c. per dozen, so the 243 eggs I received were worth \$6 07, so my bone cutter has more than paid for itself in two months.

Harry C. Parker, Ironton, Ohio.

Harry C. Parker, Ironton, Ohio.
Enterprising poultry raisers are beginning to appreciate the value of fresh cut green bone as au early egg producer and vitalizer. Don't think it is too late to buy now. Yon'll find that it will pay. We can recommend the Stearns Bone Cutter, made by the E. C. Stearns Co., Syracuse, N. Y., who send catalogue free.

60 cents per dozen. Lt. Brahma eggs. Hens from eggs from Boyer. Felch strain. Cocks from eggs from Silberstein's exhibition pens of pedigreed birds. M. E. Hammond, Hackettstown, N. J.

WHITE WYANDOTTES. 191 egg-strain. Eggs for hatching, \$1.00 for 13; \$4.00 for 100. Satisfaction guaranteed. E. O. SCHAAF, Box 121, Woodbury, N. J.

BIG MAIL for Poultrymen. Insert your name in our Poultry Directory and receive poultry papers, incubator catalogues, etc., every day. Only ten cts. silver. Poultry Directory Co., Goshen, Ind.

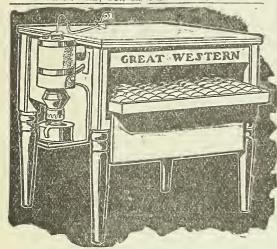
BLACK LANGSHANS Cockerels, ST.00 each. S. W. BRACKNEY, Santa Fe, Ohio.

Business Wyandottes.

Prolific laying real brown egg Stay White and Buff Wyandottes, Mammoth Pekin Ducks. 14 years line bred. Pedigree trap nest records. Score 92 to 96 each. Have vigor, correct shape, color, large size, yellow legs. Manchester, N. H., 1900,—'01,—'02, my Business Strains won 44 prizes. Best eggs, 15, \$1.75; 30. \$3; 45, \$4. The same kind I use. Established 1887. Write today. C. E. DAVIS, Warner, N. H.

WHITE P. ROCKS. Heavy laying strain. Some good yearling hens; also sixty pullets, July 1st hatch, cheap if taken at once. Eggs for hatching in season, \$2 per 15; \$3 per 30.

W. H. JONES, Jr., East Sandwich, Mass.



WELL LOCATED.

WELL LOCATED.

Among several new large advertisers with us this seasou is the Great Western Incubator Co., of Kansas City, Mo. Any one who has watched the wouderful development of the poultry business during recent years, has noticed that there has been a most remarkable growth in what Eastern people call the "South-West." It is only natural, therefore, that a strong concern should be organized at Kansas City to make and sell incubators. We are glad to call the attentiou of our readers to the "Great Western" Incubator, for it is a splendid hatcher, is not an experiment, but has had the most thorough and exacting tests, so that buvers are taking uo risks whatever. We have investigated both the machine and the people making it, and can assure our subscribers that they are both deserving of confidence. Any claims made by the Great Western Iucubator Co. can be depended ou. Their catalogue, which has a very striking and original cover, is devoted to a plain and straightforward statement of their machine, and is singularly free from much of the extravagant language used by some catalogue "builders." Every point about the construction of the Great Western seems to be as good as could be. The best lumber is used, carefully worked and well put together. The system of heating and ventilation is not only well nigh perfect, but the appliances themselves are made of the most durable materials, so that the whole machine is built for service and will last for years. The prices at which the Great Western are sold give the manufacturers a wide market, and they are shipping them into every state and territory in the Union, and to some foreign countries. They are guaranteed absolutely. Write for one of the catalogues, and read for yourself all about this splendid incubator. Address Great Western Incubator Company, Kansas City, Mo., and mention this paper.

VAUGHN'S

Wh. Wyandottes and R. I. Keds

are bred to lay and good enough to win. Eggs from our best Winter layers, \$1 for 15; \$3 for 50; \$5 per 100. We also breed Buff Wyandottes and Light Brahmas. Egg orders booked now. Illustrated circular free. A few Buff and Red cockerels \$2 each. C. E. VAUGHN,

LYONS HILL POULTRY FARM, Athol Centre, Mass.

Years a Breeder.

H. DEDERER, THOROUGHBRED

Old Fashioned Barred

Plymouth Rocks. American Dominiques. EGGS, \$3 PER SETTING.

MOUNT VERNON, N. Y.



The Manufacturer of the Shaub Compartment Brooder is not offering something for nothing, but does offer the best brooder in the world for the money. The best is always the cheapest. Illustrated cat. 4c. in stamps. M.O. Sherer. Box 22, Louisville, O.

Bred to Lay

WHITE WYANDOTTES.

Bred systematically for layers by the individual record method. Eggs \$2 for 15; \$5 for 50; \$8 for 100.

C. BRICAULT, M. D. V., Andover, Mass.

FOR SALE. Good second-hand 200-eg; Columbia Incubator, cheap. M. E. Bachman, Millersville, Pa.

S. C. Rhode Island Red. White Plymouth Rock and White Wyandotte eggs, \$1 per setting; \$4 per 100. Roscoe Caverly, Hamilton, Mass.

Sea View Farm. Barred Rocks exclusively (Thompson's). Eggs \$1.50 per setting. Eggs from Manumeth Pekius \$1 per 11. A. B. Terry, Amagansett, L. I., N.Y.

SILVER LEAF LEGHORN YARDS. The home of many prize-winning S. C. Brown Leghorns. Are bred for great egg production and exhibition stock. Eggs from best pens, 82.00 per 15. W. H. & F. S. LITTLE, North Montpelier, Vt.

FOR SALE. 15 Buff 'Dotte Pullets and 3 Cockerels that scored 90 and better. Eggs from my prize-winners that hatch. Write wants. Can please you. P. G. Durivage, 128 Mechanic St., Orange, Mass.

SPECIAL BREEDER OF WHITE WYANDOTTES.
I do not claim they lay 365 days in the year, but do claim they lay better than the average hen. Eggs \$1 per setting. H. W. Colburn, So. Lancaster, Mass.

EGGS FOR HATCHING from strong, brahmas, S. C. White Leghorns, \$1.50 per 13; \$3.00 per 30. Stock for sale.

Geo. W. Dunnican, 531 Harrison St., Passaic, N. J.

VINNERS AT NEW YORK

Rose and Single Comb R. I. Reds. Eggs for hatching \$1.50 per 15, from extra good winter layers and extremely hardy breeding stock.
EGBERT R. REID, Englewood, N. J.

GOLDEN EGGS for hatching laying strain of dark brown egg White Ply. Rocks. \$2.00 per 15. C. E. SNOW, Quincy, Mass.

'h. Wyandottes, Bd. Rocks,

Duston Strain.

Hawkins Strain. neuenenen FOR SALE, vienenenenene

Prices reasonable, quality considered. I won on all birds entered at Boston, 1902. Pens headed by winners. Three males I value \$150. No one has better birds than mine. Place orders for eggs at once. \$2 per 13; three sittings \$5. Good breeding cockerels \$2 and \$3. G. D. ELMER, Erving, Mass.

BRAHMA

COCKERELS. Felch and Cost strain. \$1.25 and \$1.50 each. Eggs, Lt. Brahmas and Barred P. Rocks 20 for \$1. W. M. & M. W. POFFENBERGER, Bakersville (Wash Co.,) Md.

SINGLE COMB

1000 Laying

Bred for Eggs.

Eggs from best matings (free range) \$1 per 15; \$4,100. W. M. VREELAND, Box F, Rocky Hill, N. J.

KULP strain Wh. Wyandottes. Farm raised. Eggs for hatching \$1.50 per 15; \$2 per 26. Bd. Rocks, good strain; heavy layers large brown eggs. \$1 per 15; \$1.75 per 30. Satisfaction guaranteed. W. T. FOSTER, Box 281, Woodstown, N. J.

HANAFORD'S Wachusett Strain ~

White Wyandottes and R. Reds

Bred for practical purposes by careful selection and use of trap nests. Blocky shape, buy eyes, yellow legs, and great winter layers: pullets having records of 50 eggs in 53 consecutive days; 125 eggs in five winter months; 219 eggs per year.

Orders for Hatching Eggs

should be placed at once.

\$1 per setting; \$2 for 30; \$3.50 for 50; \$5.50 per 100. Money need not be sent till time of shipment. If you are breeding for EGGS and MEAT, and you want rugged stock, don't fail to fry the Wachusett strain. Correspondence solicited.

FRED. A. HANAFORD,

Alder Brook Poultry Farm, South Lancaster, Mass.

C. W. and R. C. B. Leghorns. Eggs 75c. per 15. Wh. Klondikes eggs \$1.50 per 15. Some fine cockerels for sale. Miss L. Pratt, Maryland, N. Y.

Utility White Wyandottes

SELECTED EGGS \$2 PER 13.

~ ROBERT ATKINS,~~~

No. 11 West 22nd Street, New York City. Plant-Esopus-on-Hudson.



LITTLE CHICKS.

What do you know about them? The latest book out, entitled "Little Chicks," will give you \$100.00 worth of information.

Price 50 cents, postpaid. Circular free.
Excelsior Wire and Poultry Supply Co.,
Dep't H. W. V. Russ, Proprietor,
26 and 28 Vesey St., New York City.

Notes in Passing.

Better do a little at a profit than much at a loss.

The thoroughbred is most profitable and satisfactory.

The colder the weather the greater the attention called for with the poultry

flock. No single variety is worthy of being designated as absolutely the best, says

American Poultry fournal.
One good, big rat, can destroy more hopes than any other animal of twice its size that we ever had any experience with, says a writer on poultry topics.

Careful and intelligent attention to the little things of the business, will serve to shut up many of the leaks and make it what it should be, says Commercial Poultry.

The poultry business is not one for the man who has failed at everything else he has undertaken. Many of this class rush in only to add another failure to the list.

Don't let your enthusiasm get ahead of your experience, or what is the same thing told in a different way, don't try to bore with a big auger when you first go into the chicken business, says an exchange.

High roosts are an abomination, says Geo. O. Brown, and if the roosts are step-ladder fashion they are cause of everyday scramble to see which shall secure the highest. Have the roosts all on one level, and far enough to prevent the fowls from pecking each





